April . 1916

20 с. а Сорч

# Electrical Nerchandising

This is Your Warand Ours

The Imerican Eagle is Calling
Jhird Liberty Loan
Heed the Call

Western Electric Company



### CONTENTS—APRIL, 1918

Frontispiece: What the Electrical Contractor Is Doing to Help Win the War	Replacing Men Who Are Called 188 BY EARL E. WHITEHORNE	Editorials	
	When the Central Station Enters the Merchandising Field	The Jobber's Salesman	
Merchandising Policy and Cost Accounting	Salesmen Friends Can Help You Sell. 195	Hints for the Contractor	
By H. N. McConnell	A Merchandising Policy on Lamps 196	Lighting Patents	21
Selling Proper Reflecting Equipment 183	BY E. R. DAVENPORT	Sales Helps for the Dealer	21
By WARD HARRISON	Creating Demand Through the Dealer. 198 Price Differentiation on a Basis of	New Merchandise to Sell	21
Letting the Men Share in the Profits 187	Quantity and Service 200	Gossip of the Trade	213



### ON THE WIRE WITH THE EDITORS



### Liberty Bonds and Co-operation

 ${f B}^{
m ESIDES}$  buying Liberty Bonds this month, a lot of electrical men all over the country are also cooperating-in committees, on teams, and by personal effort-to sell bonds and put the present Loan across with a heavy over-subscription.

These patriotic jobbers and contractors, manufacturers and central station men, employers and employees, who sit down together to work out a Liberty Bond selling program, are lending a strong hand to help win the war. But as they work shoulder to shoulder to sell Liberty Bonds, they are finding how old-time, imaginary trade groupings and dissensions quickly disappear under the influence of friendly personal contact. They are getting a new understanding of "the other fellow," and of his relation to the industry as a whole. And with the lesson in democracy they get as citizens, comes a new understanding of what co-operation can really mean in the electrical trade!

### Next Month—All About Farm Lighting!

NE-HALF of the United States' 110,000,000 people live on the farm!

But the statement that there are 55,000,000 people thus interested in farm lighting in one way or other, probably means less to the reader of these lines than the fact that-

For every consumer of electric service who is now a prospect for electrical appliances and labor-saving devices, there is another prospect on some kerosene or candle-lighted farm, waiting to be sold a farmlighting outfit and all the contraptions that are demanded by his town cousin.

To speed along the happy day of the electric-lighted barnyard, the motor-driven churn, and the automatic milker, next month in these columns we propose to tell you more about this wonderful waiting farm-lighting opportunity-and some "success stories" of jobbers, dealers and contractors who have gone into this field and found profitable business waiting them at every road-side lane and gateway!

Remember, the Farm-Lighting Issue of ELECTRICAL MERCHANDISING, out May 15!

### "They Steal It To Read!"

HE trouble I find with your ELECTRICAL MERCHANDISING," complains a New England jobber, "is that I can't keep a copy on my desk, unless I lock it up, out of sight. The boys around the office steal it to read! Of course I want them to get the ideas from it. But the March number, for instance, disappeared from my office the day after the postman brought it, and there have since been a dozen of our retail customers asking me what I thought of one article in that issue, which I never got a chance to finish. You see now why I'm complaining, and I hope you'll suggest a way to keep the boys from stealing it to read."

Easiest thing, old top! Of course, locking up your copy of ELECTRICAL MERCHANDISING in the safe, along with your Liberty 4's and 41's, is one way. But did you ever stop to think of just how much it would be worth to your house to have ELECTRICAL MERCHANDISING coming each month to the homes of every one of your men who ought to read it-from president and sales manager to the salesman on the road? If the remedy appeals to you, send us the list and a check, and we'll do the rest.

JAMES H. McGRAW

ARTHUR J. BALDWIN Vice-President and Treasurer E. J. MEHREN Vice-President

JAMES H. McGRAW, JR.

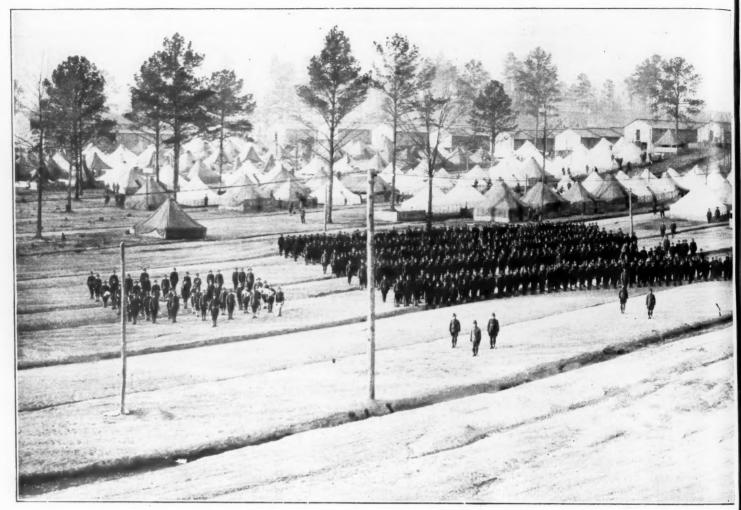
### McGRAW-HILL COMPANY, INC., Tenth Avenue at Thirty-Sixth Street, New York City

CHICAGO, 1570 Old Colony Building

CLEVELAND, Leader-News Building

Copyright, 1917, by McGraw-Hill Co., Inc., Issued on the Fifteenth of Each Month. Entered at New York Post-Office as Second Class matter. Subscription Rates in United States, Mexico, Cuba, Porto Rico, Hawaii and Philippines, \$2.00 per year. Canada, \$2.50. Elsewhere, \$3.00. Single copy, 20c. When change

ELECTRICAL MERCHANDISING \{ \text{Member Society for Electrical Development, Inc.} \} \text{"DO IT ELECTRICALLY"} \text{Member Audit Bureau of Circulations Member Associated Business Papers, Inc.} \} \text{"DO IT ELECTRICALLY"}



Camp McClellan, Anniston, Ala. - Complete Electrical Equipment for This 40,000-Troop Cantonment Was

# What the Electrical Contractor

### How Skilled Electrical Organizations Are Saving Time

AST week the electrical work for the great new war office building in Washington—the largest office structure in the world—was let to an electrical contracting firm—new evidence that Uncle Sam recognizes the value of getting the trained organization of the electrical specialist at work on his important rush jobs!

Camp McClellan, at Anniston, Ala., pictured above, is another example of the speed and economy of the electrical contractor's work; for this cantonment, capable of housing 40,000 troops, was electrically equipped throughout by an electrical contractor's organization, at a marked saving of both time and money. This \$200,000 electrical job was completed days in advance of the program stipulated by the government, in spite of revisions suggested by the electrical contractor, which saved the government money, although increasing the contractor's responsibilities and decreasing his commission. When the job was finished and in service,

the electrical contractor, T. H. McKinney, received this letter from the colonel in charge of construction:

I consider the electrical plant at Camp McClellan a highly efficient one, and first class in every way.

Had the contractors followed the original plans furnished them the work would have cost the United States considerably more, and considerably more profit would have been made by them, but in the interest of the service the contractors modified the plans to the extent that several thousand dollars were saved, for which I desire to especially commend them.

cially commend them.

CHARLES L. DULEN, Colonel, Q.M.A., N.A.,

Constructing Quartermaster Camp McClellan, Anniston, Ala.

The arguments for employing electrical contractors on government work instead of handling such work by hastily assembled staffs collected by the general contractor, make a strong case for the electrical contractor.

First: By the employment of skilled sub-contractors for electrical work, the government avails itself of the productive power of knowledge, experience, and organization *esprit de corps*.



Installed by an Electrical Contractor, at a Saving to the Government in Both Time and Money

# Is Doing to Help Win the War

and Money in Uncle Sam's Vast Construction Program

Second: Because of this organization efficiency, the electrical contractor can assemble and install electrical equipment with greater speed and at less cost than an organization hurriedly pulled together.

Third: By reason of his familiarity with labor conditions in the trade, the electrical contractor can regulate the supply of labor with less difficulty and less likelihood of labor disturbances than anyone else unfamiliar with these conditions.

Fourth: By using the services of the electrical contractor the government aids an important branch of the building industry to reach its maximum development and efficiency for service during and after the war.

Fifth: The electrical contractors base their claim to the privilege of serving the government on the fact that they have proved their worth; for if economy did not result from their employment by the general contractor (as is generally done in normal building operations), they would not be in existence to-day. Employment of the established sub-contractor is justified by the acknowledged principle of *utilizing existing* productive agencies, for by encouraging the general contractor's effort to draw competent skilled assistants from existing electrical organizations, the latter's capacity for present service on other government work and for future service is diminished, and the productive power of knowledge, experience and organization team-work is destroyed.

Electrical contractors who are equipped to do government work have never raised the question of the terms of their employment by the government. Their first desire is to serve the government's cause and they will accept employment on any terms which the government regards as adequate. And the electrical contractors only ask that the government give them an opportunity to make use of their existing skilled organizations, that these may be kept ready for present and future usefulness to the government and to the public.

# Merchandising Policy and Cost Accounting

War-Time Conditions Call for Business at a Profit and an End to Sales Activities That Decrease the Net

By H. N. McCONNELL

Commercial Manager United Gas & Electric Corporation, New York City

UST AT THIS MOMENT when every central station manager is searching eagerly for opportunities to introduce more war-time savings in the operation and administration of his company, this message from Mr. McConnell comes particularly to the point.

Much has been said about cost keeping and better accounting. The N. E. L. A. has urged it. Mr. Hurley, Mr. Goodwin and other leaders have pressed the point. The new national contractor-dealer association has cost keeping as one of its foundation stones. And the Society for Electrical Development is now undertaking a campaign to the same end as its contribution to the merchandising movement.

Everyone believes in cost keeping-but the question is, how much. Here is the situation from a different angle that shows clearly what cost keeping offers to the man who is striving to improve efficiency as a means of meeting in some part the added burdens of expense. This detailed system of classification for expense accounts is one in active use by a large number of utilities. It has been proved in actual experience.

McConnell says-"The time has come for gleaning." The first step surely is to know where to glean and why. As he points out, there is only one way to be sure .- Editor.

for kerosene in China. There never new idea they brought into the world. had been. The poor, benighted heathens that make up their four hundred millions hadn't got quite that far along the road of illuminating engineering. So a ship was loaded up with coal oil lamps, small ones, cheap ones. The company sent them over and gave them all away to prominent Celestials in the sea coast cities. That was pioneering. But after these samples had been strewn around, pioneering stopped and business began. If One Lung Sam wanted to possess a marvelous foreign lamp like Sing Song Hop's, he had to buy it, and the price he paid brought in a profit to the Standard Oil, and likewise he bought kerosene that paid another profit. In other words, after the pioneering came straight business, when each sale was looked to for its proper individual profit.

Now, compare this with conditions in the central station industry and you get an interesting angle on prevailing practices in merchandising

OME years ago they say the appliances. In the early days, of Standard Oil Company decided course, the central stations were all that there ought to be a market pioneers. They had to be. It was a They had to educate the public to appreciate and want electric light. And when the appliances came along, once more their problem was one of



H. N. McCONNELL

introduction. So they bought them from the manufacturers, priced them just a little above the cost and sold them as low as possible, relying for their profit on the current the appliances would consume after they had been put in use. It was pioneering, pure and simple. They wanted to establish electricity in the home. They wanted to standardize it. And they have. But they have kept on pioneering just the same. When the pioneering period reached its proper end and business-at-a-profit should have rightfully commenced, the most of us neglected to revise our selling policies. And even now many have not done so.

I wonder if they ever stopped to think about the way that phonographs and safety razors are sold. You buy a talking machine and pay a-plenty, which includes a good, fat profit to the dealer and the manufacturer. And then before it is any good to you, you must buy records, and more records, and these pay a profit too. Or, you buy a safety razor -does the dealer sell it below cost, because he knows that you will have to purchase blades perpetually? He sees no reason why any part of his blade profit should be eaten up by losses on the sale of razors. He sees no reason why the razor should not pay a profit of its own. And so it does. And if the policy is practical with razors and with phonographs, it is no whit less good business when it comes to selling all the merchandise that goes out of the electric shop.

The fact that current sales will follow with additional profit after an appliance is sold by a central station is no argument against that appliance paying proper merchandising

profit also where it is sold. And on the sheet. They lose sight of the waiting here, because he doesn't there are other weighty reasons why opportunity to pay all this sales ex-know his costs. He has not analyzed it should. The contractor and dealer, pense out of sales profits. Yet they his statements. But before any man with no current sales to figure in, can, and it is possible in many cities. can hope to make any business entershould not be submarined by any other field

The general manager of a central station in a fair-sized city in the Middle West recently showed me his annual report. He showed a net profit of \$40,000 on the year, and was well pleased with it. I dug a these the twelve months. It included salaries and expenses and campaign selling costs which were not offset by profits on the sale of merchandise, for they were pricing these appliances at a slight advance on cost price only.

"This is interesting," I said. "But do you know that you could have brought your net year's profit up 25 per cent, and paid a bigger dividend if you had tried?"

"You are crazy," he replied in amazement. "What do you meanif I had tried?"

"Just this," I answered. "If you had calculated this cost of running your commercial department and figured it as overhead and added it to the price of all the merchandise sold, then your department would have broken even and this \$10,000 would not have been deducted from your gross. Your net profit would have been \$50,000 instead of \$40,000. and that is a 25 per cent better showing for your year of business."

The trouble was he hadn't thought of it in just that light. The cost of the commercial department in his mind was an item of expense, and had to be. It couldn't be figured against current sales except in the gross. Appliance sales were just a side line in the work of the commercial department work. help sell current. It does good. So he just priced them so they would pay their cost and something for a profit and just charged off the balance in the usual way. That was his attitude. That is the attitude of too many utility managers to-day, bred of the habit of not analyzing their reports. They look at totals. They fail to dig into the meaning Total expenses \$94,213.26 Net revenue \$7,245.00 and the promise of the lesser items

such cut-profit practices that have every seven years in the recent his- his costs. He must know his costs been discredited long since in every tory of central station selling has so that he may compute his overcome a season of alarms, when the head and add it to his prices. boards of directors meet and demand economies. They take the annual painting called "The Gleaners," that statement and study it. They see has been in my mind a lot of late. the item of commercial department loss. They say, "Why can't we fire little deeper into his items of ex- money?" And the manager says, Behind them following with rakes pense and found that his commercial "We can," He takes for granted and gathering up the stray stalks department had cost him \$10,000 for that it is expense, that it has to be of wheat are peasant women, gleanexpense. He does not see the possi- ing the field of everything that has bilities for profit, the added income fallen from the forks of the men and

And what is the result? About prise self-supporting he must know

Somewhere there is a famous We have all seen copies of it. It is a harvest scene in France. The salesmen and save this harvesters have passed over the field.

### Company No. 1-Merchandise and Jobbing

Total Revenue and Exper	ises
Revenue	
Appliances and supplies\$ Jobbing work	49,800.10 51,658.16
Total revenue\$1  Expenses	01,458.26
Superintendent of wiring de-	
partment\$	1,506.04
Cost of appliances and supplies	32.946.35
Superintendent of wiring department	43,070.74
Total direct cost\$	77,523.13
General Expenses	
Stable and auto expenses\$	1,924.86
Storeroom expenses	2,353.97
General miscellaneous expenses	72.50
Shop expenses	734.82
Rent	300.00
Total general expenses\$	5 386.15
Selling Expenses	
Commercial management\$ Salesmen's salaries and ex-	1,200.50
penses	3,602.05
Demonstration	921.00
Appliance advertising Rent	614.34 $1,200.00$
Office cumplies and expenses	93 77
Printing and stationery	42 95
Insurance	217.50
Miscellaneous	23.77 $42.95$ $217.50$ $18.00$
_	
Total commercial department	
expenses\$	7,840.11
Accounting Department	
Superintendence\$	600.00
Salaries of clerks	628.65
Rent	60.00
Rent	19.75 53.10
Printing and Stationery	53.19
Total accounting department	
expenses\$	1,361.51
Treasury Department	2,002102
	400.00
Superintendence,\$	120.00
Salaries of collectors and clerks	600.00
clerks	60.00
Rent Printing and stationery	28.10
Uncollectible bills	408.98
Removal of appliances	35.00
Legal expenses	100.00
Office supplies and expenses\$	75.00
Total treasury department	1 407 00
expenses\$	
Administration Expenses	,
Salaries and expenses of gen-	600.00
eral manager and clerks\$	600.00
Rent	5.80
Printing and stationery	9.48
_	
Total administration expenses\$	675.28
Total revenue\$1	101,458.26 94,213,26

### Company No. 2-Merchandise and Jobbing

Total Revenue and Expen	ises
Revenue	,
Appliances and supplies\$ Jobbing work	38,513.99 4,215.14
Total revenue\$	
Expenses	
Superintendent of wiring de-	
partment	634.80
partment Cest of appliances and supplies Jobbing work cost	27 568.77 2,598.09
Total direct cost\$	
General Expenses	
Grable and auto expenses	101 = 9
Storerdom expenses	191.52 317.50 195.67
Shop expenses	195.67
Stable and auto expenses\$ Storeroom expenses\$ Shop expenses Rent	240.00
	044.00
Total general expenses\$	944.69
Selling Expenses	
Commercial management \$ Salesmen's salaries and expenses Demonstration Appliance advertising Rents Cffice supplies and expenses Printing and stationery Insurance Miscellaneous	1,219.87
Salesmen's salaries and ex-	0 100 25
penses	2,100.25
Appliance advertising	143.46 613.00
Rents	2,400.00
Office supplies and expenses	362.32
Printing and stationery	362.32 76.85 103.20
Insurance	103.20
Miscellaneous	277.22
Total commercial department expenses\$	
Accounting Departmen	
	236.00
Superintendence	593.83
Rent	60.00
Rent Office supplies and expenses	32.17
Printing and stationery	91.80
Total accounting expenses \$	1,013.80
Treasury Department	
	20 00
Superintendence	36.00 575.00
Salaries of collectors and clerks Rent Office supplies and expenses Printing and stationery Uncollectible bills Removal of appliances	60.00
Office supplies and expenses	31.03 87.45 480.00
Printing and stationery	87.45
Uncollectible bills	480.00
Removal of appliances	27.00 41.00
Legal expenses	
Total treasury department expenses\$	4 000 40
expenses	1,337.45
Administration Expense	8
Salaries and expenses of gen-	
eral manager and clerks	840.00
Rent	60.00
Printing and stationery	16.80 4.35
_	
Total administration expenses\$	
Total revenue\$ Total expenses\$	42,729.13

been left behind. There is a thought kept up their pioneering. They then we must sell for prices that will here for us all right now, for we have must come to a halt because they lift the burden of the selling from overlooked the gleaning in the cen- can't go on. The times no longer the earnings of the company. That tral station industry in years gone justify a charge on profits for the means "know your costs at every by. But the time for the gleaning upkeep of a commercial department. step and cover them with proper has come. The war with its high If we would sell-and there is cry- prices on the goods you sell." costs of everything has laid a stay- ing need for appliance sales that ing hand on all these men who have will bring profitable off-peak load— costs. Reckon the expenses of your

It is a simple matter to know your

### Classification of Expense Accounts

### Appliances and Supplies

Credit to this account all revenue derived from the sale of appliances and supplies of all kinds including motors and lamps.

### Jobbing Work

Credit to this account all revenue derived from all jobbing work performed by the company where a charge is made for same.

### DIRECT COST

### Superintendent of Wiring Department

Charge to this account proper proportion of salary and expense of general superintendent and chief inspector and his staff of clerks and inspectors, and other expenses of the office such as light; heat, water, telephone, etc.

### Appliances and Supplies

Appliances and Supplies
Charge to these respective accounts the company's cost of appliances sold to consumers. The company's cost to be considered, the value at which the appliance is carried on the books of the company, which value should cover purchase price of appliance, freight and drayage from railroad station to storerooms.

### Jobbing Work Cost

Jobbing Work Cost

Charge to this account all expenses of material and labor incidental to the installation of wiring work done by the company the expense of which is to be paid for by the consumer. Where work is sub-contracted and the expense is still to be paid for by consumer the expense is to be charged against the gross income derived from the consumer for this class of work.

### Cost of Installation

Also charge to this account all expenses incurred in connecting appliances sold by the company from the time they leave the storeroom until they are connected. This will include the cost of delivery from storeroom to consumer's premises, labor and material connecting appliances.

### GENERAL EXPENSES

### Stable and Automobile Expenses

Charge to this account proper proportion expense of labor and material incidental to operation of stables and automobiles.

Note: Subdivision of "Other Expenses" should cover all other expenses such as light, heat, water, telephone, feed, repairs of harness, vehicles, cars, etc., outside of labor and rent.

### Storeroom Expenses

Charge to this account proper proportion of general storekeeper and assistants' salary and expenses incidental to operation of storeroom, such as light, heat, water, telephone, stationery, insurance on stock at ter, telephone, stock, etc.

### General Miscellaneous Expenses

Charge to this account all other expenses incidental to operation of merchandise and jobbing departments, not covered by any other enumerated accounts above.

### Shop Expenses

Charge to this account labor and material incidental to cleaning and repairing appliances preparatory to selling and other expenses which cannot be allotted to any special appliance, and a proper proportion of renewal expense of shop and wagon tools also expenses of light, heat water, etc.

### Rent

Charge to this account proper proportion of rent in which building, shop, storeroom and stable are located. In case building is owned by the company rental value of space should be computed.

### SELLING EXPENSES Commercial Management

Charge to this account proper proportion of salary and expenses of commercial manager and his assistants, including clerks and stenographers.

### Salesmen: Salaries and Expense

Charge to this account salaries, commissions and expenses of salesmen engaged in selling appliances. Where salesmen devote part of their time to securing contracts for electric service, proper proportion of these expenses should be charged against commercial expense account of canvassing and soliciting.

### Demonstration

Charge to this account salaries and expenses of demonstrators and items of expense incurred in conducting demonstrations for the sale of appliances.

### Advertising Appliances

Charge to this account expenses for advertising sale of appliances only. This expense should cover advertisements in newspapers, periodicals, window-dressing or other displays, etc. This expense should be regulated by budget commensurate with gross appliance business. General or publicity advertising should be charged to other appropriate expense accounts.

### Rent

Charge to this account proper proportion of rent of building in which salesroom and commercial manager's office is located. In case building is owned by the company rental value of space should be established.

### Office Supplies and Expenses

Charge to this account proper proportion of commercial manager's department office supplies and expenses such as light, heat, water, telephone, ice, mops, brooms, janitor's salary, etc.

### Printing and Stationery

Charge to this account all expenses of printing and stationery used directly for merchandise and jobbing business and proper proportion of that used in commercial manager's office.

### Insurance

Charge to this account premium paid for insurance on stock of appliances and supplies carried in salesroom.

### Miscellaneous

Charge to this account proper proportion of expenses of commercial department other than those covered by accounts enumerated

### ACCOUNTING DEPARTMENT

### Superintendence

Charge to this account proper proportion of salary of chief clerk in charge of commercial accounting office.

### Salaries of Clerks

Charge to this account salaries of book-keeper and clerks keeping merchandise and jobbing accounts.

### Rent

Charge to this account proper proportion of rent of building in which commercial accounting office is located. In case building is owned by the company rental value of space should be established.

### Office Supplies and Expenses

Charge to this account proper proportion of commercial accounting department office supplies and expenses, such as light, heat, water, telephone, ice, mops, brooms, janitor's salary, etc.

### Printing and Stationery

Charge to this account all expenses of printing and stationery used directly for merchandise and jobbing accounts and proper proportion of that used in office of chief clerk of accounting department.

### TREASURY DEPARTMENT

### Superintendence

Charge to this account proper proportion of salary of chief clerk and his assistants and other expenses incidental to the operation of this department, such as subscriptions to mercantile agencies, etc., necessary for efficient operation of the department.

### Salaries of Collectors and Clerks

Charge to this account proper proportion salaries and expenses of collectors and clerks other than those directly employed in office of chief clerk of treasury department, including fees paid to attorneys and collection agencies for collection of accounts.

### Rent

Charge to this account proper proportion of rent of building in which commercial treasury office is located. In case building is owned by company rental value of space should be established.

### Printing and Stationery

Charge to this account all expenses of printing and stationery used directly for merchandise and jobbing accounts and proper proportion of that used in office of chief clerk of treasury department.

### Uncollectible Bills

Charge to this account monthly and credit to a reserve account estimated proportion of losses on uncollectible merchandise and jobbing accounts. In case it is the policy of the company not to create a reserve account, losses from uncollectible accounts should be charged against this account when determined.

### Removal of Appliances

Charge to this account all expenses incidental to the removal of appliances for non-payment of bills.

### Legal Expenses

Charge to this account all legal expenses, such as attorney fees and expenses in securing writs of sequestration, etc., in connection with removal of appliances for non-payment of bills.

### Office Supplies and Expenses

Charge to this account proper proportion of commercial treasury department's office supplies and expenses such as light, heat, water, telephones, ice, mops, brooms, janitor's salary, etc.

### ADMINISTRATION EXPENSES

### Salaries and Expenses of General Manager and Clerks

Charge to this account proper proportion of salary and expenses of general manager and clerks and stenographers in his office, also proper proportion of fee paid to other corporations or individuals for supervision of commercial department.

Charge to this account proper proportion of rent of building in which general manager's office is located. In case building is owned by the company rental value of space should be established.

### Office Supplies and Expenses

Charge to this account proper proportion supplies and expenses of general manager's office, such as light, heat, water, telephone, ice, mops, brooms, janitor's salary, etc.

### Printing and Stationery

Charge to this account proper proportion of printing and stationery used in general manager's office.

fice in the plant on a back street and take no steps to sell appliances or service. These clearly are expenses the general office. chargeable to merchandising. Charge other running costs as any other merchant would be compelled to pay. Charge all the salaries of those engaged in the work and a fair proportion of executive salaries as well. True, there might be a commercial manager even if no appliances were sold, but he would have more time to devote to current sales and would sell more current. Figure it in and draw up a classification that gets down to the bone with every month's report and tell the truth.

It is not necessary to study the two accompanying expense statements to see the interest and the influence that comes in knowing the details of your costs. These are two extreme cases, both actual experiences in 1917. One of these central stations maintains a wiring department; the other conducts a very successful electric shop. See how the profits are effected. A few years ago both these companies were still clinging to the pioneering attitude, but the light broke in on them. They began to analyze things and find out just exactly where they stand each month. And this habit of analysis has put their prices up to cover all the costs and proper profits. It has made them more cautious in buying stock. It has put an end to the burden of dead stock. It has developed the merchandising habit of reckoning in terms of turnover as well as dollar totals.

In the statement of the Number One Company, sales of appliances and supplies total \$49,800.10. The jobbing work, the wiring, was more than \$50,000, while Company Number Two sold \$38,513.99 worth of appliances and supplies but only did \$4,000 of jobbing and repair busi-Their total commercial deness. partment expense, however, showed a difference of only about \$500, the reason being that the Number Two Company has gone into the merchandising business in a very enterprising way and has its electric salesthe city entirely separate from the of many clerks. general office of the company-in

selling effort which you could avoid fact, two blocks away. The result is a cost finding system can't be exif you were content to have your of- that their rental cost is twice the size of the proportion of rent charged by the Number One Company whose spread the popularity of electric commercial department is housed in

> profit on the year of \$7,000 odd. The Number Two Company showed a profit of only \$413, but the prices at which it had sold appliances had been calculated to assimilate all the proper overhead expense and commercial costs. With \$60,000 less total revenue than Company Number One it had still made money. It simply shows what can be done with proper pricing. The charges that its department carried, of course, look heavy to the eyes of the contractor but he must remember that this central station had much heavier commercial department expense than would be found in any contractor's or dealer's electric shop.

The basis on which these costs are

Don't TALK about winning the war. Help to win it. If you cannot fight yourself, help the boys to do it. Feed them, clothe them, give them guns and shells. You can do this by buying Liberty Bonds.

classified is set forth in the schedule of accounts reproduced on page 280, and it is worth a little study. Perhaps it looks intricate, and the accountant who is now working with a less detailed system may consider that it will entail more work than it is worth. Some companies prefer to set an arbitrary overhead expense of say 18 per cent and let it go at that, but such an arbitrary overhead, after all, is inaccurate and does not realize at all the purpose of cost keeping. Moreover, even though a careful classification such as this requires the hiring of extra clerks, it's worth it, for costs fluctuate and guesses do not safely follow fluctuations. Through an accurate knowledge of what these fluctuations are month after month, innumerable large and small economies and revisions of the system here and there, room located on the main street of which in the end will pay the cost

Of course, the introduction of such much talk and many meetings.

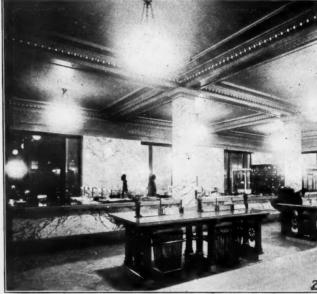
pected in itself to bring any great relief from present high costs of operating. This is a feature of these war times we are living in. but knowledge of your costs will help The Number One Company with you find many practical expedients also just as much rent, light and its big wiring income made a net which will relieve the situation. It will assist you in innumerable ways and bring down the business to a basis of accurate pricing and adequate profit which will mean that when the war is over your merchandising business will be clean cut, your department will be safely founded on a rock and not rest on the shifting sands of improperly balanced profits.

> There is another to be secured by the adoption of an honest system of cost-keeping. It puts an end to many a bad old rule which had been costing money year in and year out without its being realized. For some of our traditional rules have become menaces to the businessfree extensions, free renewals of this and that, cost price on campaign sales and a half dozen other practices which come to mind. None of this can be justified under the present war conditions and these are the leaks that every manager is seeking right now to plug. These are the opportunities for improved efficiency that will help carry on the burden of the high war costs, and to discover them there must be an analysis of costs that seeks out every item of undue expense and sets it right.

The pioneering days are over. The period of business for a profit has been solidly established in those cities where the central station knows its costs and sells its goods for profit, for herein lies the just solution of the vexing problem of co-operation between the central station, dealer and contractor. Where the central station persists in pioneering, taking losses on the goods it sells, the contractor and dealer naturally cannot compete. They are not organized for pioneering work. What they are organized for is the sale of merchandise and they can sell it on the same fair cost of profit basis that a opportunities become evident for proper cost analysis demands of every central station. In other words, a little bookkeeping will do more to develop practical co-operation in the local electrical family than

### Selecting the Proper Reflecting Equipment





Selling

### LIGHTING Effect—

Not merely

### LIGHTING FIXTURES

is the best form of service a salesman cangive to his customer.



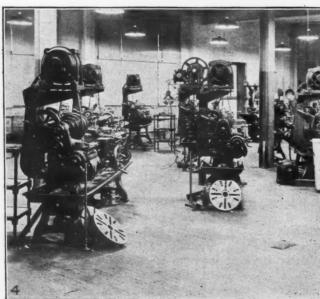
1. Dense opal reflectors and bowl-frosted lamps used for lighting the upper floor of a large department store.

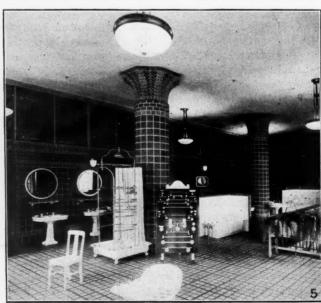
2. Large inclosing globes used in the lighting of a newspaper office.

3. Semi-inclosing units in a general office where the celling construction does not permit indirect or semi-indirect lighting.

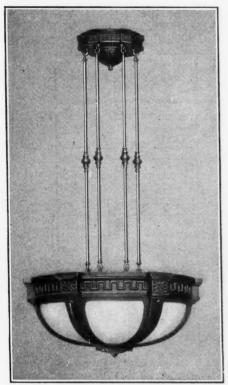
4. A modification of the semi-inclosing type of unit which minimizes glare, and gives the proper diffusion for fine machine work.

5. Semi-indirect units of pleasing design in a display room.





# Selling Proper Reflecting Equipment



The efficiency of the luminous-bowl unit is but little impaired by the massive metal decorations

T IS HAZARDOUS for an expert and impossible for a layman from an off-hand examination of a lighting unit to pronounce it the one best adapted for any given purpose. However, the expert examining a display of reflecting equipment would have no difficulty in condemning certain units as undesirable for a given purpose, assuming that such units were in evidence, nor in classifying the remaining ones tentatively as suited to various definite purposes. But he would, nevertheless, be forced to refer to test data before he could say positively that a unit was a good one.

Lighting systems in which incandescent lamps are employed fall naturally into three general classifications:

1. The direct lighting system, in which are employed open reflector units of the familiar bowl and dome shapes; totally inclosing balis or stalactites; and the so-called semi-inclosing units, where an open reflector is inverted beneath another reflector of the flat or shallow shape (units 1 to 8, see chart);

A Service Which the Salesman Should Be Prepared to Give

### By WARD HARRISON

Illuminating Engineer, National Lamp Works of General Electric Company

2. The semi-indirect system, in which are used bowls of opal or prismatic glass (units 9 and 10, see chart);

3. The indirect system, in which reflectors of the mirrored-glass type are most frequently employed (unit 11, see chart).

Equipments adapted to these three types of systems shown in the installation photographs which accompany this article.

Open reflector units of good design rank first from the standpoint of efficiency. However, there is a considerable difference in reflection coefficient between the various surfaces used in such reflectors and even between different samples of the same class. For example, if two reflectors are placed side by side and in one the reflecting surface appears gray in comparison with the other, that one is sure to absorb considerably more light.



Totally indirect units installed in a private office



The same decorations applied to the inclosing unit above would absorb a considerable portion of the light

Opal-glass and porcelain-enameled steel reflectors of whatever contour have the same characteristic distribution of light in the lower hemisphere, that is, they all spread their light over a moderate area beneath the source. With prismatic and mirrored-glass reflectors, on the other hand it is possible to obtain anything from an extensive to a focusing distribution of light.

Wherever translucent-glass reflectors are used, the illumination on the vertical surfaces such as walls, the side of machines, shelving, etc., is practically certain to be satisfactory if the illumination on horizontal surfaces is satisfactory. But with opaque reflectors of the deep-bowl shape, vertical illumination is not so well cared for. For this reason dome porcelain-enameled steel reflectors are, in general, preferable to those of the bowl type.

In order to minimize glare, open reflectors should be sufficiently deep to hide the light source when the unit is view at angles near the horizontal. For the same reason, Mazda

### A Guide to the Selection of Reflecting Equipment

Various lighting units are rated in accordance with six fundamentals. The order of importance of these criteria is different for different classes of service. In a drafting room, for example, the elimination of shadow is of far more importance than the illumination of vertical surfaces, whereas in the lighting of a furniture showroom the reverse is true. The grades assigned to the different equipments are relative and apply only when the units are used with the same size of Mazda C lamp and under similar conditions.

In some cases individual units so far excel the others of the same group as to warrant a higher classification than here given.

LIGHTING	UNIT	POWER REQUIREMENT	VERTICAL ILLUMINATION	DIRECT GLARE	REFLECTED GLARE	SHADOWS	MAINTENANCE
PRISMATIC GLASS	90° to 180° 22%	AMA	В	C+ A	C A	C A	C+ A
Bowl-Frosted Lamp	0° to 90 65%			A	DOX.		Å
LIGHT OPAL GLASS	90° to 180 - 35G	B	A A	C+ -	CA	C+ 🛆	B 🛆
Bowl-Frosted Lamp	0° to '90° 50%		TOY'S	A Contract of the Contract of	No Xe		Å
DENSE OPAL GLASS	90° to 180 - 20%	A	B $\triangle$	B	CA	C A	B+ 🛆
Bowl-Frosted Lamp	0° to 90 60çe,	3			TABY!		Å
LAT ENAMELED DOME	90° to 180° -25%	C+7 0	A o	D	D P	D &	A ÷
Clear Lamp	0' to 90 -60%		TAR	"	10 x		Å
ENAMELED BOWL	90° to 180 (14)	B+ @ A	CA	C+ 4	D A	D A	A A
Clear Lamp	0° to 90 65%				The second second		Å
ENAMELED DOME	90° to 180° 0%	A MZ	A	B	C+ A	B	B+ 🛆
Bowl-Frosted Lamp	0° to 90° -75%			8	PASX:	Ja	Å
ENCLOSING GLOBE	90° to 180° – 35%	C+ @ 0	A Ĉ	B -	C+ \$	B 5	B ◊
Light Opal Glass	0° to 90°-40° i				Rox.		Å
SEMI-ENCLOSING	90° to 180° – 20%	B (7) 0	B+ 😇	B+ 7	B 5	B+ 8	C+ 8
Opal Glaw Bowl	0° to 90 60%			A	6 ×		À
SEMI-INDIRECT	90° to 180° - 60%	C+ 7	B+ -	B+ 4	B	B+ 4	o+ +
Light Opal Glass	0° to 90° - 25%			A			À
SEMI-INDIRECT	90° to 180° - 70%	CO	B	A	A	A	C e e
Dense Opal Glass	0° to 90° - 10%			A			A
INDIRECT	90° to 180° - 80%	0 0	C+ t	A	A	A	C. O
Mirrored Glass	0° to 90° - 0%						A

Copyright, 1918, Engineering Department, National Lamp Works of General Electric Co.

 ${}^{1}\!\mathrm{Rate}$  D on glare when used with lamps larger than 200 watts.

<sup>2</sup>Rate D on glare and reflected glare, and C on shadow, when used with clear-bulb lamps.

<sup>3</sup>If globes are very large, rate B on glare; if very

\*Rate C+ on glare if bowl is noticeably brighter than upper reflector.

Note that C+ falls between B and C.

Power requirement rating is on basis of equal horizontal illumination.

Maintenance depends on contour of reflector, construction of fixture, and condition of ceiling. The rating is based on labor involved in maintaining the units at comparable degrees of efficiency, and on the likelihood of the need for cleaning being apparent; the latter accounts for the light semi-direct being rated as better than the dense.

C lamps in open reflectors should alferable to that from bare lamps, and greater than 200 watts should not be of such equipment has resulted in its used except where the units are hung very high-and even in the latter case, bowl frosting is usually desirof considerable diameter, particularly where softness of shadow is of importance.

Inclosing globes are usually of opal, prismatic, or frosted glass. Such units emit a greater quantity of light in directions near the horizontal than light directed upward. The bowl, if any other lighting unit used in interiors; and vertical illumination is always sufficient if the illumination on horizontal planes is satisfactory. The opal balls are available in varying degrees of density. The purpose of the glass is, of course, to diffuse the light and it is obvious that glass of a density just sufficient to make the globe appear uniformly bright best fulfills the requirements, for the absorption of light will then be a minimum. Opal-glass units which will diffuse the light properly need not necessarily be thick. A thin, very dense glass which has the same diffusing quality as a thicker glass will, in general, absorb a smaller portion of the light. In order to combine the advantage of greater efficiency, possessed by the thin glass, and that of mechanical strength, possessed by the thick glass, a thin coating of very dense opal is sometimes "flashed" onto a body of clear glass of the usual thickness. Globes in which a dull red outline of the lamp filament is visible are generally considered unsatisfactory from the standpoint of appearance.

All inclosing globes should, without exception, be of large diameter so that their brightness when used with the lamps for which they are designed will not be excessive; the use of inclosing globes too small for the lamps they contain is responsible for a large part of the glare in lighting to-day. In prismatic units the prisms serve to break up and diffuse the light; the distribution is under better control than is the case with opal or frosted globes. Frosted-glass globes serve to spread the light coming from the filament, but with Mazda C lamps the brightness of the source is seldom sufficiently reduced to render the units entirely comfort-However, illumination from frosted inclosing-globe units is pre-

ways be bowl-frosted and sizes this fact combined with the low cost general use in spite of cleaning dif-

Semi-inclosing units are in general able. Open-reflector units should be preferable to open-reflector units and for most purposes to inclosing globes or light-density semi-indirect units. They should, however, be of large area and the upper reflector should extend out over the lower inverted reflector far enough to intercept the



The value of this semi-indirect unit lies chiefly in its freedom from light-absorbing metal decorations

of glass, should be at least dense enough to prevent a sensation of over-brightness from being experienced as soon as the unit comes within the field of view.

Semi-indirect fixtures are perhaps the most popular of all the desirable units. Their use is, of course, for efficiency reasons, limited to rooms in which the ceiling is light in color or can be made so. As a rule the vertical illumination will be adequate where the intensity on the horizontal plane is satisfactory. On the other hand, it should be remembered that the portion of the light reflected from the ceiling has its maximum intensity directly downward and therefore cannot be counted upon to supply a large volume of light on given installation, lighting units may

vertical planes. Light-density semiindirect units are superior to heavydensity units in respect to vertical illumination, but usually in this respect only. Light-density units of practical dimensions cannot compare with those of heavy-density from the standpoint of direct glare or of reflected glare—two most important considerations in the locations where semi-indirect units are usually employed. With either type, no massive decorations should be placed around the edge of the bowl or near the edge where they will intercept and waste an appreciable portion of the light. It should be remembered, too, that the appearance of a semiindirect unit may be very different lighted than when unlighted.

Totally-indirect units have the virtue of being the most nearly foolproof of all lighting units from the standpoint of glare. In addition, if of good design, they are satisfactory from an efficiency standpoint when used in rooms with light ceilings. As regards vertical illumination, totally indirect units are comparable with the very dense semi-indirect types. The light is, of course, highly diffused and glaring reflections in polished surfaces are minimized. The diffusion of light is such, in fact, that the statement is sometimes made that shadows are too greatly subdued; for a certain degree of shadow is essential to the best perception of objects in their three dimensions. On the other hand, in the lighting on plane surfaces, as in offices, shadows can do no good and may do much harm. Luminousbowl indirect units, which combine with the indirect lighting a certain direct component, are often to be desired. With totally indirect units the outer surface of the bowl may be decorated as desired without impairing the efficiency of the unit.

Any unit, no matter of what type, should be designed so that it will be slow to collect dust and, what is of equal importance, so that it may be easily cleaned. The reflecting surface should be permanent, hard, and smooth, and, for the sake of efficiency, its shape should be fairly regular so that light will not be pocketed, i.e., reflected back and forth and finally lost.

From the few suggestions given above, it becomes evident that, for a

be tentatively grouped by examination into two classes-those which are not desirable and those which may be desirable. Open, inclosing, semi-inclosing, semi-indirect, and totally indirect fixtures are not all suitable for any given purpose. For example, open-reflector units are in general suitable for coarse manufacturing work, small stores, upper floors of department stores, the kitchen in the home, etc., but are not suitable for drafting rooms, schools, club rooms, hotel lobbies, living rooms, and the like. In the same way, semi-indirect units are not suitable for foundries, factories, or offices where the ceilings are badly cut up by piping or beams, but are highly desirable for schools, living rooms, offices, stores, and locations

As a check on those fixtures which appear to be desirable for a particular location, test data on absorption. distribution, etc., must be studied. From a purely engineering viewpoint, the choice of reflecting equipment for any given purpose may be determined almost entirely from six criteria: Power requirements for a given horizontal illumination; vertical illumination; direct glare; reflected glare; shadows; maintenance.

having similar requirements.

It must be emphasized that the relative importance of the various criteria should be carefully weighed with respect to the particular problem at hand. For instance, in an office the criteria would rank in importance: (1) direct glare; (2) re- poses. flected glare; (3) shadows; (4) power requirements; (5) maintenance; (6) vertical illumination. On the other hand, where lamps are to be hung above a crane in a foundry the order of importance would be: (1) power requirements; (2) vertical illumination; (3) maintenance; (4) shadows; (5) direct glare; (6) reflected glare.

In the chart, the highest rating given is A, denoting excellence, while D, the lowest, indicates that an installation of units so rated in any particular will very likely prove unsatisfactory. The ratings B and Cwhile indicating a result not equal to A, are decidedly superior to rating D. In other words, a rating of B, C+, or C in certain respects does not disqualify a unit provided that in the essential requirements of a given location the unit is rated A or B+. promissory note.

### "Conserve by Use of Electricity"

How Fuel and Transportation Can Be Saved by Wider Use of Electric Cooking. Figures Presented Before Minnesota Electrical Association, Minneapolis, March 12

> BY GEORGE A. HUGHES President Edison Electric Appliance Company, Inc.

OAL cook stoves are woefully plied all these coal-using homes with inefficient in changing coal energy into cooking energy. By far the greater amount of energy escapes up the flue and only a small fraction cooks the meal-barely 2 per cent.

It has been conservatively estimated by some experts that the average family of five consumes, for cooking only, 800 lb. of coal monthly, or nearly 5 tons annually. On the other hand, to supply this family with ample cooking current the central station requires 262½ lb. of coal per month, or only slightly more than 1½ tons per year—only one-third as much. Thus, by means of electric cooking there might be saved to the country more than 6 tons of coal per family per year.

SAVING WOULD EQUAL COUNTRY'S WHOLE COAL SHORTAGE

The Society of Electrical Development estimates that the 9,000,000 domestic coal ranges in the United States consume 90,000,000 tons of coal per year, for all kitchen pur-

Now, if the central stations sup-



### BUY LIBERTY BONDS

It is a favor to yourself to buy Liberty Bonds. You are gaining a new business adjunct-that of thrift. You are laying up financial backing for a rainy day. Remember, they are always negotiable. Besides, you do not have to wait for the interest. Also, you never have to protest Uncle Sam's

cooking current only, the United States would save 45,000,000 tons yearly. This, together with the saving by the use of cooking current generated by the water-power central station, would more than make up the annual shortage of 50,000,000 tons which Mr. Garfield says is caused by the war. Besides, the housewives of America would be relieved of the necessity of toting at least 45,000,000 tons of coal yearly from coal bins to ranges, and scooping up and carrying away nearly 10,000,000 tons of ashes.

Hundreds of thousands of homes in the Middle West show a preference for burning anthracite and Pocahontas coals in their kitchen ranges rather than using coal mined nearer home. To bring this coal from the Eastern mines to the Mississippi Valley entails a haul of several hundred miles. On the other hand, central stations can use coal mined only a short distance away. The use, therefore, by Middle Western homes of electric current instead of Eastern coal for cooking, would do away with the hauling of thousands of coal cars hundreds of miles annually. saving thus effected would run into millions every year.

### A SLOGAN FOR THE NATION

While we are a nation of "doers," we are also a nation of "wasters." We may well be proud of our achievements, but we cannot be proud of our wasting. And now we must do more and waste less; we must increase our output and stop every leak—that is what conservation means. We should be awake to every form of conservation; and electricity may well be called the nation's Conservator.

"Conserve by the Use of Electricity" should be your slogan for the duration of the war.

Go prepared to drive that slogan home in your own community and to impress its importance on all those in authority and power.

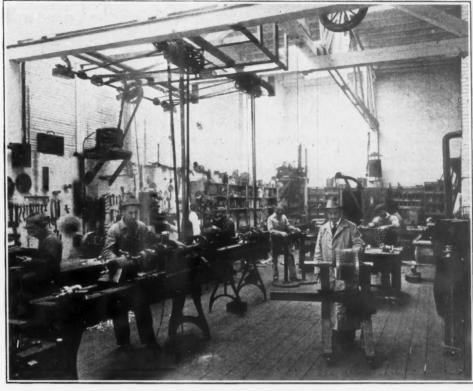
# Letting the Men Share

# in the Profits

Plan by Which Robert Skeen, of Portland, Ore., Keeps Books Open to Employees, Figures Profits on Each Job, and Splits 50-50 with the Men Twice a Year

UT in Portland, Ore., there is an electrical shop where all men are partners with the boss; where every man sees the company's books and knows whether the work he is doing is making a profit and how much; and, fi-

nally, where the men who cannot make good do not have to be discharged—they promptly quit of their own accord because each man knows how much the other fellow is earning for the company and therefore how much he is contributing to the common profit. This shop is run by Rob-



Besides their regular pay the men receive pro rata shares of 50 per cent of the profit made on the product of these machines

ert Skeen. Nobody else that we know of has ever tried it and probably the system would not be feasible under other conditions, but Robert Skeen does it and has made a reputation for fair and square, honest treatment which is envied by employers in the electrical line in the Northwest.



The co-operative basis on which this plant works insures maximum production and minimum waste, both in time and materials

The proposition which is made to new men as they enter the employ of this firm is that the profits of the business will be divided semi-annually. Fifty per cent of the net profits go to Mr. Skeen and the other 50 per cent is divided among all employees, share and share alike as a bonus or addition to their wages-which, by the way, are the same as in other shops doing similar work. policy makes for a high degree of diligence, and astonishing economies in time and material are recorded on all of the work done. Moreover, cach man realizes that he is partly responsible for profits in which his fellow workers share. No one punches a time clock and all are free to come and go as they please, but the usual working hours are ordinarily ob-

Second only to the directing genius of "the boss," the scheme depends upon the system of open bookkeeping by which all the men may see what each man does. That is, just how much it costs to do each

job, and how much profit accrues to each workman when he is as- When the work has been passed upon from it. If a man is slow at his work, so that the charges for labor on a job reduce the possible profit, that fact is patent to his fellow workers and this naturally constitutes a to the workman serves as both work spur to prevent the recurrence of order and time card and when the such a condition. If he cannot prevent its repeated occurrence, experience has shown that he needs no urging to make way for a better man.

A white blank form bearing date, name of customer and description of the serial number of the job, is issued

outside. This form is made out in duplicate, the carbon copy being on colored paper. The copy which goes job is finished the workman returns it to the bookkeeper after having noted upon it the amount of time the job called for.

When jobs are reported completed. a "time and material" sheet is made the work to be done, together with out which shows the amount of labor the workmen have access to the books and material actually used on the job. at any time.

signed to work either in the shop or by the inspector and reported as finally completed and returned material checked, the bookkeeper figures up the net profit on the job. That is, he deducts from the price charged the customer, the total cost of the workman's time in wages and the cost of the materials used, plus all incidental charges. The remainder is posted as a net profit on the job. all these figures are recorded by means of a simple plan of bookkeeping, and

# Replacing Men Who Are Called



S THE MEN are called out before long in the second draft, there will be many young chaps to go who now are in the stores and offices of electrical merchants, contractor - dealers and central stations.

Who will do their work and carry on the business while they are away? It is a pressing problem, yet one that seems to have a practical solution right at hand.

for the wiring crews, the outlook is not quite so promising, because these are experienced mechanics who have learned their trade through years of work, and the number of over-draftage men available will naturally be limited. It will take some time for the office work and selling in the store effect will be.

Experience in Substituting Women, and the Matter of Making a Good Selection for the Job

By EARL E. WHITEHORNE

-and outside, too-the industry will When it comes to finding new men naturally turn to young women and will find them a very able help in time of need, for women have qualified before the world in these last years of war to undertake work that was formerly looked upon as a man's job. Here is another niche in business that they will be filling before long, and new men to become proficient. But in it is well to consider just what the

In the contractor's office, for instance, there are at present usually a male bookkeeper, a male stock clerk, and, if this contractor has a little store and is merchandising appliances, probably another man as inside salesman. But the bookkeeper and salesmen can be spared if necessary, and their work assumed by women. In the dealer's store, both for the sale of wiring supplies and current consuming devices, women are well adapted and successful, for in the electric shop, the demonstrating of household appliances has long been looked upon as woman's work and can be extended easily to include all the inside selling and stock keeping. Again, in the central station organization, the experience is already varied and extensive. Women are being used for house-to-house

canvassing, for lecture and demon- ance, control over others-particustration work of every kind and have larly men-willingness to work under made good in every branch of selling. Also, to fill war vacancies, women are reading meters in the residence districts, delivering bills, collecting money, and filling every kind of an inside job in connection with the auditing and record keeping. In short, the use of women to make good losses in personnel due to the war has been tried out and carried far enough to prove that it is both feasble and satisfactory.

We men are apt to cling to habit and assume that something we have never tried cannot be done, and here is a place where prejudice is very strong. In thinking of women employees for jobs that heretofore have been held only by men, we are too apt to have in mind not just the kind of woman we would choose for this particular job, but the other kind that we already have employed for other purposes.

### MUST SELECT WOMEN WITH SAME CARE AS MEN

There are as many kinds of women as of men, and in selecting employees we will discriminate no less than we have always done in the hiring of men. You know a dozen women, when you think of it, women of thirty or thereabouts, who would sail circles around a man in the hazardous pursuit of overdue money. They will be received with courtesy because they are women. They are serious and dignified in purpose and would not be so easily turned aside as men. That's just one case. To sell behind the counter, to lecture, to demonstrate from house to house, to keep the books, each job demands its type of man, and so no less its type of woman, and each type commands its proper price. There is no lack of good material available. It needs intelligent selection by employersthat's all-just as in the case of hiring men.

The Merchants' Association of New York after a thorough investigation of local experience in replacing men with women in its report

"The type of occupation in which women can give satisfaction is rather definitely limited. In general, the female worker is either excluded from or at a disadvantage in occupations requiring strength, endur-

particularly disagreeable conditions, long period of apprenticeship, natural mechanical ability, as well as in positions where there is a close contact with the public, in positions where the public considers men more desirable than women.

"On the other hand, the female worker has advantages in many occupations usually considered as distinctly male. On all kinds of light work requiring manual dexterity, quickness of hand, eye or brain, which can be accomplished after a comparatively short period of instruction, the female worker generally learns more quickly than the male and eventually turns out more and better work."

In its conclusion the Merchants' Association lays particular stress upon the fact that women are readily teachable and, therefore, adaptable in emergencies when loss of men brings need of quick relief. The association's criticism of the undesirability of women for positions in close contact with the public hardly applies to their employment in electric shops for selling goods, because their almost universal use in this capacity in other stores is precedent enough, even without the records of our own experience.

I have talked with managers of drug, department, book, jewelry and other stores where women are employed in growing numbers to sell the goods. "Are women just as willing to buy your goods from women as from men?" I have asked. "Will they regard advice coming from women employees as satisfactory? How is it when it comes to selling to men?" The answer seems to be about the same in every case. Women can sell out of a store as well as men, if care is exercised to pick the right type of woman for the job.

In cases where the selling is nearautomatic, the handing out of standardized goods for which demand comes voluntarily, almost any girl of pleasing appearance will do. On the other hand, if it is jewelry, for instance, some kinds of clothing, or any other merchandise where there is much selecting to be done, the customer desires advice, and whether salesman or saleswoman, he or she can sell best who supports his or her opinion with the strongest personality. And so in selling our goods,

labor-saving and comfort-bringing appliances for the home, it seems to me the woman has the distinct advantage over any man. She is working the woman's sphere of influence. The man who comes into your store to look at suction cleaners will put more faith in what a woman tells him of their practical utility than in the words of any salesman. And, quite naturally, women buyers feel the same way.

### SELLING WORK DEMANDS WOMEN OF PERSONALITY

It seems to me, therefore, that there is little cause to fear the loss of men in the electric shop. If men are drafted they must go and here's good luck to them, and we will simply have to find young women of the same grade of intelligence to do their work. In clerical positions the use of women is already standardized and there are regular sources of supply. In selling work, however, and for all these other jobs that need more of common sense, good personality and eager interest than of previous training in business, it is far better to go outside the business field and call for volunteers, than to attempt to make a good stenographer into a demonstrator or a bill collector.

This is war work. The men have gone. The women are needed to replace them, and if you will look for them with that point of view there are plenty of the right kind ready to take the job that frees a soldier. In every town, therefore, it would be wise for contractor and dealer, jobber and central station to be foresighted, and seek out these substitutes ahead of time.

The question will arise, of course, of how to pay these women substitutes. Should the woman worker be paid the same wage as the man whose place she fills? In the New York Merchants' Association report the unanimous opinion is expressed that she should. If the woman can do the work, she is entitled to the pay. For, after all, though women can be found who will be willing to accept the job for less, you must remember that it is intelligence and character and personality that make the value. The more you pay, the higher type of woman the position will attract, and man or woman—the results will always be entirely dependent on the



# The Buying Line OVER HERE Helps the Firing line OVER THERE





"No merchant can sell goods until he draws people to his store," is the belief of the Chicago management. Clever advertising, compelling window displays, attractive store interiors and wide-awake clerks are what make the Commonwealth Edison Shops successful.

# When the Central Station Enters the Merchandising Field

The Dealer Contractor Who Says that the Central Station Has No Right to Sell Merchandise is Wrong, So Long as the Central Station Sells Its Merchandise Right

HOULD a central station sell appliances?

"No!" answers the contractordealer. "We must," answer the central stations.

And then both sides proceed with arguments and incidents to prove whatever they desire.

As a matter of fact, both are wrong, and both are right. It is true that some central stations have carried on their merchandising activities in a manner prejudicial to the contractor-dealers' interest. It is also true that in many communities electrical development would be virtually stagnant if it were not for the central stations' aggressiveness.

By FRANK B. RAE, Jr.

to us, simmers down to this: There is no valid reason why central stations should not merchandise appliances provided their merchandising policies are sound and that they conduct such business fairly. The contractor-dealers have no especial "rights" in the matter. The department store, the hardware store, the drug store, even the racket shop, all sell electrical appliances and supplies. If the central station wants to do the same, that is the central station's business. All we can ask or expect is that their retail selling shall not The whole controversy, as it seems overstep the line which separates

honest merchandising from what is now a well-defined crime-"unfair competition."

N ITS merchandising policies, the Commonwealth Edison Company of Chicago is, we believe, an example of fair central station competition. Its electrical stores are conducted for merchandising profit, not as "feeders" to the company's load. Its retail prices are in accordance with good mercantile practice. It charges a proper overhead against all sales. Its buyers are shrewd: its salespeople are keen: its displays both in the windows and inside its shops are on a par with the best department stores.



E. A. Edkins, manager of electric shops of the Commonwealth Edison Company. Chicago, believes that the department store, the electrical dealer, the hardware man and the central station should all run their electrical merchandising on the same basis.

will tell you that the Commonwealth would have to stand the loss. We periodical bargain sales which de- sell shop-worn, slow-moving or semimoralize the market. We asked obsolete articles at reduced prices E. A. Edkins, manager of the company's electric shops about this, and here is his answer:

### APPLIANCES WITHOUT ESTABLISHED RESALE PRICE

"The contract department of the company has an annual summer appliance sale. For this sale we buy appliances which have no established resale price and we sell these appliances at a profit. The same or practically identical appliances are sold by the department stores of this city at various cut prices-some of them much lower than our campaign sale prices, and in at least one case at a price below the department store's

"We sometimes lump into these campaign sales appliances of standard make and established price, but in no case do we refer to them by name in our advertising—we simply put them in with the sale lot and 'work them off.' The appliances thus sold are either shop-worn or are types which the manufacturer has discontinued making. They are appliances which we could never sell at the original established prices, and if we did not 'move' them in this manner we would either have to junk them and take all the loss or turn

Some Chicago electrical merchants them back on the manufacturer, who provided it is not done in a way to injure the manufacturer or our competitors-or ourselves. It must be remembered that we have more at cern in Chicago.

"Another point:

summer campaigns do not take trade from the regular electrical merchants. In these sales we tap new territory. The solicitors go into what we call the 'cottage districts'territory in which working people live who rarely get down to the trade centers. Very many of these people never saw an electric iron or toaster until our solicitor knocked on the back door and started his selling talk.

That looks like a pretty fair alibi to the price-cutting accusation.

As a matter of fact the department stores seem to be the chief transgressors in this matter of price-cutting in Chicago. Not all of them, but some of them. Certain stores appear to use electrical merchandise as a "leader"-to sell it at or about cost just to bring the trade to the stores. This is an old practice and one now frowned upon by merchandise managers of the better sort. It is demoralizing; it is criminally selfish, and it is unprofitable in the long Company cuts prices, that it conducts feel that it is perfectly legitimate to run. When practiced by large concerns or in a large way it comes under the jurisdiction of the Federal Trade Commission as a malignant form of "unfair competition."

Let us look at the other side of this price question. Not only do the stake in maintaining the standard of Commonwealth Edison electric shops electrical goods than any other con- maintain the resale on all establishedprice items (until same become shop-These special worn or of practically obsolete pat-



The Chicago Edison Shops make a specialty of portable lamps, a class of merchandise that pays from 80 per cent to as high as 200 per cent gross profit, Many of the exclusive designs sold by this company are made up in accordance to Mr. Edkins'

tern, as explained), but they charge a good, fat profit upon all lines which will carry the extra margin. This is especially true of high-class portable lamps of which many thousands of dollars worth are sold annually.

Mr. Edkins may properly be classed as a connoisseur in this field. Many of the more expensive lamps sold in the shops are designed in accordance with his suggestions: he imports the potteries and bronzes used as lamp bases and searches the markets for fabrics and materials which can be utilized for shades. When these lamps come to him for pricing he normally adds from 80 to 125 or in extreme cases even 200 per cent to the cost. In making such prices he is guided, even controlled by the prices charged in the department stores for similar goods, but because of the unusual line carried in the electric shop he is generally able to get the top price.

A criticism which is frequently made against the appliance sales department of a central station is that its knowledge of and acquaintance with users of electric light, coupled with its vast financial resources, give such a department an undue advantage over the small independent merchants. At least one of these criticisms will no longer "hold water," for central stations to-day cannot afford to tie up their available capital in long-time payment accounts and very few of them are doing it. On the other hand, a constantly increasing number of banks-notably the Morris Plan banks-when properly approached by responsible dealers, are more than willing to finance time payment purchases of electric appliances, and certain manufacturers of washing machines are accustomed to handle time-payment "paper" for desirable distributers.

In the case of the Commonwealth Edison Company, time payments are not encouraged except in the case of the larger and more expensive articles such as washing machines and vacuum cleaners, which are sold everywhere on this basis. When the customer cannot make a cash purchase and appears to be a desirable risk, terms are arranged, but under conditions which any merchant of proper credit standing in his community could duplicate. The Edison Company's customer in such a case

Extra! Extra! Advance Announcement of Chicago's Most Sensational Furniture Sale Which Starts Monday, 8:30 Features Will A. M. Be This All goods tagged for inspection Satur-\$25.00 Reed Lamp for \$12.95 day A stupendous purchase of fine furni-ture at big discounts. It is 72 inches high and has a shade 28 and has a shade 28
inches wide, lined
with cretonne and ornamented with a 3
inch silk fringe. You
are invited to call and
see this Satur-Every piece of fur-niture which will be in this sale is tagged for Saturday's inspec-tion. It will be a record-breaking furniture event.

day.

An example of department store price cutting and central station price maintenance. The department store offers a \$25 floor lamp at practically half price, thus demoralizing the market and netting itself a loss. The central station offers an exceptional value in the table lamp advertised, but it is a value which local merchants could duplicate and there is a profit in every lamp.



pay a bank or a so-called "finance been sold in the previous year, after company." So this complaint, per- the change in location and the hirhaps formerly justified, is no longer ing of the laundry "expert" the sales

As to the company's more intimate knowledge of the current-consuming public, this advantage according to Mr. Edkins is largely imaginary. "No merchant can sell goods until he per month to 150 per month. draws people to his store, and when he gets them there he must handle them right or he will not make sales. Window displays, store arrangement and the knowledge which the clerks have of their merchandise-not of the people—is what seli's goods."

months the washing machines and ironers were kept in an alcove away

dation exactly as he or she would than a dozen ironing machines had immediately jumped to an average of two machines a day, and are still increasing, while the sale of washing machines jumped up from approximately seventy-five machines

There was another example of this: At one of the meetings of store salesmen, Mr. Edkins asked how many of them felt competent to demonstrate an electric range. Only one man answered. He then asked how many had sold one or more An example of this last was the ranges. The same man raised his laundry equipment department at the hand. He was the only man in the company's Adam's Street store. For organization who knew ranges, and the only one who had sold any. As a result of this incident, each Edison from the main aisle and the sales shop sales person was urged to study were far from satisfactory. Finally a the merchandise with a view to bespace was selected near which every coming a specialist, and to-day one person entering the shop had to pass, may find there a crew in which every and this was put in charge of a man man and woman can do satisfactory who knew the merchandise. The re- work in every department and expert pays for the time-payment accommo- sults were startling: whereas less work in one or more departments.

such that each is practically in busi- for the public convenience. ness for himself. They are assigned minimum quotas of sales for each quarter, these quotas depending upon the class of merchandise sold and their location in the store. As a result, all of them are eager to excel, and each is jealous of his "rights." It is a pleasure to buy in the Adams Street shop because of this spirit—the clerks are keen and careful: they will go to any trouble to exhibit and demonstrate their goods; and when the sale is complete it is entered up with all the pride of Cæsar's famous message, vidi, vici."

It was one of the criticisms of the old Chicago electric shop on Michigan avenue (now closed) that no independent merchant could sell enough goods there to pay the rent, and consequently it was assumed that the Commonwealth Company did not keep a proper accounting of selling costs. Whatever the truth of this statement, the present shops under Mr. Edkin's management "know where they're at."

The branch stores, which are also used as distribution points for lamp renewals, for branch repair shops and for the public's convenience in paying bills, have a very definite charge against these several departments. On the other hand, every item is charged against the stores and this expense is met out of profits. Some idea of the rigidness of these charges is gained when we learn that the rental of the Adams Street store alone was almost 9 per cent of the gross business last year.

Electrical merchandising by the Commonwealth Edison Company is on a sound basis. The company is turning over its stock at an average rate of four and one-half times per year, which is the test of shrewd It estimates its coming buying. year's sales on a basis of about 18 per cent increase over last year, which is the test of confident selling. Careful buying, aggressive selling, right pricing—that to our mind, constitutes sound merchandising.

At the risk of an anti-climax let us recite one final incident: Commonwealth Company recently discontinued its practice of free delivery of lamp renewals to the customers' premises. To offset this, a number of so-called "lamp stations"

The method of handling clerks is were established throughout the city A. Fowler, Memphis, Tenn., spoke. No sooner had these stations opened than people began to inquire there for appliances, and they criticised the company severely for not carrying appliance stocks in every lamp renewal station. Which incident raises this question:-If those Chicago electrical dealers who say that the central station has no "right" to be in the appliance business were taking care of the public demand, why does this same public insist that the central station should carry appliances at its lamp stations?

We leave the question to you.

### Series of Goodwin Meetings in Detroit

The national executive committee of the National Association of Electrical Contractors and Dealers held its spring meeting at the Hotel Statler, Detroit, on April 1, 2 and 3, and advantage was taken of the gathering of the out-of-town electrical men to arrange a number of meetings of local electrical organizations during the three days of the executive committee's sessions.

The Electrical Club of Detroit en-K. Tuohey, Springfield, Mass., and J. L. Goodwin and O. H. Caldwell.

Copies of the club's sparkling weekly bulletin, edited by C. T. Beck, secretary, were distributed as souvenirs among the guests.

On Monday evening the electrical contractors and dealers of Detroit met at St. Andrews Hall to hear James R. Strong and W. L. Goodwin discuss the new plan of national association organization.

The principal meeting of the week, however, was the dinner on Tuesday evening when 220 electrical men, representing all branches of the industry-manufacturers, jobbers, central station and dealer-contractors, assembled in the Statler Hotel banquet room to hear addresses by National Chairman W. Creighton Peet, Mr. Strong and Mr. Goodwin.

On Wednesday the Michigan Association of Electrical Contractors and Dealers also met at Detroit, and listened to addresses by Mr. Goodwin and other speakers.

The work of the National Association executive committee was taken up largely with matters preparatory to the annual convention, to be held in Cleveland in July and with other routine affairs incidental to the launching of the new association. A committee was appointed to prepare tertained the National officials at and publish a book on "The Goodwin luncheon on Monday. Ernest Mc- Plan," consisting of James R. Strong, Clearly, of Detroit, presided, and W. chairman; Paul H. Jaehnig, William

### National Contractor-Dealer Association Headquarters Now at 110 West Fortieth Street, New York City



Loaded on two big motor trucks, the entire office equipment and records of the National Association of Electrical Contractors and Dealers left Utica, N. Y., on March 15, and under ordinary traveling conditions would have reached New York the second day. Snow and ice made going difficult, and the N. A. E. C. & D. caravan did not reach Manhattan until a week later, but the method of moving by motor truck nevertheless saved much time and confusion compared with the usual plan of moving by freight. Harry C. Brown, general secretary, is now comfortably settled, with his office staff, in the new association headquarters in the World's Tower Building, 110 West Fortieth Street, New York City, to which address all mail should be sent.

# Salesmen Friends Can Help You Sell

Do You Give the Manufacturer's and Jobber's Men a Chance to Pass Along to You the Up-to-Date Ideas in Store and Specialty Line Merchandising Which Are Making Profits for Other Dealers?

By A. M. BEVERIDGE

R. ELECTRICAL MERCH-ANDISER, are you making any money? Are you sleeping nights, or are you dreaming of the appliance business that the central station is doing? If so, there is something wrong. Either you lack real earnest interest, or concentrated effort.

To begin with, Mr. Merchandiser, you haven't known whether to call your store an "electric shop" or a "warehouse." You have been spending one-half of your time figuring wiring contracts so close that the other fellow couldn't make any money if he won. You are carrying an investment of \$100 to \$5,000 in merchandise. And you are spending the other half of your time worrying about the sales the central station is making. In giving so much thought to the sales that the central station is making, you have entirely overlooked your own opportunity.

The whole trouble is, that you have



"How do you know, Mr. Dealer, that the particular sweeper or washer you are carrying is the best for the money?"
"You will never know, if, at sight of an appliance salesman, you throw up both hands and shoo him out of the door."

expected something for nothing, and those good old days are no longer. You have waited for the people to come in and buy dust-covered merchandise but it can't be done. On the contrary, they are waiting for you.

Let's get together and see what is needed. To begin with—a little punch, a little pep back of some good clean dollar-value merchandise will make



"After three or four days, with talks given by the manufacturer's and jobber's salesmen, you will get up so much steam that you can't hold in."
"Steam is what you want back of any selling plan."

friends. Pep; because 75 per cent of your success is based upon enthusiasm. Let the other 25 per cent be honesty, clean tactics and a good knowledge of your merchandise.

The big idea is to let the world know that you have something they want; that they should have. You can't wait for them to come to you. You've got to go after them, educate them, sell them the idea, and ring up the cash register.

Special sales conducted on the "direct return" basis and incidental publicity is what you want. For this you want the proper merchandise that you are willing to stake your reputation on. How are you going to get the dollar value and the education unless you will show the salesman or the jobber or the manufacturer the courtesy of an audience? How do you know that the particular vacuum cleaner or washer you are carrying is the best for the money? You will never know, if at sight of an appliance salesman you throw up both hands and shoo him out the

THE SALESMAN HAS VALUABLE IDEAS TO SHARE

Take the salesman into your office and get his story. Either be convinced that he has a better dollar value than you have or be convinced that you have the grandest vacuum cleaner that was ever made. The salesman can give you selling schemes house and all built around a special

that have been proved. He can give you ideas that you can't buy.

You've got to believe and have reason for believing that you have the best. And, convinced of this yourself, you can convince your customer. It's catching. If you are in to make or break, you are going to talk, eat and sleep your merchandise. Don't turn down the salesman at sight. It is the surest sign of poor business.

Get a selling plan thoroughly mapped out in your own mind: have your merchandise carefully selected; get one or two snappy young men who never sold a thing before in their lives.

Your untrained salesmen will readily scent your idea and can be shown that the idea is right and your merchandise cannot be equalled. Put them on salary and commission. After three or four days inside, with talks given by the jobber's and manufacturer's salesmen you will all get



"When that day comes you will courte-ously invite every manufacturer's and job-ber's salesman, who calls, into your private office. You will come to realize that they are the ones who oil up the machinery of your organization."

up so much steam that you can't hold in. Steam is what you want back of the selling plan.

Start off your sales plan with a drive on some one of your appliances. The plan does not imply merely spending money in newspaper advertising but does necessitate newspaper display, extra store and window display, lantern slides for the picture limited offer. No one of these medi- the salesman is what pulls your sales ums alone will result in a successful up to 85 per cent of the trials. sale. It is the concentrated drive and "hit them from all sides" plan that wins.

If the special offer is a free-trial or extended time-payment plan, or any one of a hundred plans, give what you advertise. If you make it a freetrial drive, it is because you have enough confidence in the merits of your appliance to feel that if you can get it in the homes it will sell itself. The free-trial offer will get it into the homes, but that little punch from whole thing back of an inquiry. of your organization.

If it is the extended time-payment offer you are driving at, you want to offer a 5 per cent discount for cash, and that little punch and your special training of the salesmen is what pulls the cash, instead of first payment, from those who have it.

one idea of putting what you have to sell before the public in a way that starts them thinking, arouses their curiosity. Curiosity is the

What more does the salesman need? During 1918 the live-wire dealer is going to run one sale after another, and if he has put the live steam back of them he is going to show a net profit at the end of the

year that spells "balance in the

bank."

When that day comes you will The whole thing boils down to the courteously invite every salesman who calls, into your private office. You will have come to realize that it is the manufacturer's and jobber's salesmen who oil up the machinery

How the Central Station Will Profit from

# A Merchandising Policy on Lamps

The Baneful Effects of the "Free-Renewal" Plan, on the Lighting Company, Customer and on the Retailer, Discussed in Address before the Boston Electrical Contractor-Dealers on March 21

NCANDESCENT lamps, to my mind, should be distributed on a merchandising basis just as much as any other lamp-socket device. At the present time the only appliance which is furnished free by central stations is the Mazda lamp. Motors, heating appliances, etc., and, in fact, all other electrical appliances are sold at some price, and not given

The time arrived years ago for the central station to discontinue the free supply of lamps both for first installations and for renewals. In fact, we firmly believed from the beginning when the Mazda lamp was first placed on the market that it should be sold, and not given away, and from that time up to the present we have practiced that theory. There seems to be no argument for continuing the practice of giving away goods (free lamp renewals) other than that stumbling block to all progress "that we have always done so."

In the early days of the electrical industry service was of poor quality and, in order to give the customer satisfaction, it was necessary to, furnish the best lamps obtainable. That the customer might have no incentive to purchase lamps of an

By E. R. DAVENPORT

Sales Manager Narragansett Electric Lighting Company, Providence, R. I.

inferior quality, they were furnished free by the electrical companies for several years. At the present time this reason does not exist. Central stations have not found it necessary to furnish motors because inferior



E. R. DAVENPORT

motors could be purchased by their customers, and the same holds true of heating devices.

NO TROUBLE FROM THE SALE OF INFERIOR LAMPS

I repeat that from the introduction of the Mazda lamp up to the present time our company has furnished free no Mazda lamps whatsoever, and yet we have not had trouble from the sale of inferior lamps by others, and the lamps have been sold at the manufacturer's list prices less the manufacturer's discounts according to the quantity used. In fact, it is doubtful if you can purchase Mazda lamps except from practically (directly or indirectly) one source. Our sale of lamps for the year 1917 was 351,-000. This record tends to prove the correctness of our theory.

Then again, is not the furnishing of lamps free a mild form of discrimination? It would appear to be unless renewals are made on the basis of kilowatt-hours used. If a customer through carelessness or other reasons requires and received more lamps in proportion to his current consumption, is he not purchasing current at too low a price, and is not the other customer paying too high a rate?

figures only the cost of electricity and gas itself, and not the cost of the devices which use that commodity. For instance, if we ask Mr. Jones how much it costs him to light his house with gas, he states his bill is about \$2 per month or \$24 per year, but he makes no mention of the \$3 worth of mantles, and the \$1 worth of chimneys, and various other incidentals, and if you remind him that he gets free electric lamps he says, "Yes, the company can well afford to give them away because the lamps use so much electricity."

### CUSTOMER SELDOM CONSIDERS COST OF RENEWALS

Ask a man how much it costs for electric lights in his house and if he happens to be using Mazda lamps, he states that his bills are about so

Invest to your limit in Liberty Bonds. A few years from now, when you need money for your business, you won't have to mortgage your stock. Your Liberty Bonds are always negotiable.

much a month. He makes no mention of the cost of Mazda lamp renewals. In other words, the point I wish to bring out is that the cost of the apparatus is forgotten, whether it be a motor, flatiron, electric range or a Mazda or carbon lamp, and that the only thing retained in the mind of the customer is the monthly bill.

It would seem then, that should a company give up the furnishing of lamps and apply the saving made thereby to a reduction in the price of current for lighting purposes, that company, by such reduction, would be more popular with the consumers of electricity for lighting purpose. As between a company located in one city and a company located in another city, that company selling current at

lower price per kilowatt-hour irrespective of free renewals of carbon or tungsten lamps, would stand in a more favorable light with the public. Electric light companies are generally judged by their base price for lighting service.

Some central stations have taken up the free supply of the large size Mazda lamps. This seems to me discriminatory. Many customers may

The average consumer of electric possibly take advantage of the larger the absolute records showed a higher current and of gas for illumination size Mazda lamp because they are fur- wattage per socket in use and an inwould be better served by several lamps of smaller size. If their current consumption is increased, their load factor may be decreased. Large bills stimulate a desire to "turn off the lights." Foster the use of the small-size lamps, and then our customers will light more than one room in the house, and they may also buy a flatiron: incidentally, they will use more current and the merchant will not always be after his clerks to "turn off the lights" when they are not absolutely needed.

> I believe that the practice of the central station that sells Mazda lamps to its customers on the same basis that the manufacturer would if he sold direct in the central station's territory to be the only correct one for various reasons. The longer the central stations sell Mazda lamps at a loss, the longer the manufacturer will maintain the present prices, not having the incentive to increase his volume of business by a reduction in the price of the lamps. The central stations that are selling Mazda lamps lower than the manufacturer's list prices are working against their own interests.

### MERCHANDISING BASIS GIVES DEALER A CHANCE

Further, there are many decided advantages of selling Mazda lamps at a profit, because it enables those who handle the lamps to have a liberal policy regarding their sale, and it also allows the other fellow (electrical contractor and other branches of the electrical trade) to handle lamps and this all tends to place the sale of Mazda lamps nearer to the basis of gas mantles.

A certain central station, as a rea recent reduction in lighting rates, immediately announced a discontinuance of its free lamp renewal policy but was fearful as to the results of its lamp business on this new basis. It anticipated less lamps being used,

me that his company had kept a very business in that particular city and good.

nished free, whereas their needs creased lamp business as a result of merchandising lamps, with none of the imaginary troubles existing.

> Another large company recently was ordered by the state commission to reduce its lighting rates. When the new rate became effective the company discontinued its previous policy of furnishing free lamp renewals and immediately established the merchandising of lamps at list prices. At the same time the lamp manufacturers signed up a large number of lamp agencies throughout the city with contractors, drug stores, etc., to merchandise the lamps on the same basis as the central station company. This company has continued this policy and, as far as I know, it is successful.

> The lamp manufacturers recently have taken a step in the right direc-

> Reciprocity is the key to business success. It's the keynote of the Liberty Bond. We lend Uncle Sam money. He spends it with us. Keep the circle going. Buy Liberty Bonds.

> tion, we believe, and are offering a new form of contract to central stations which should encourage the merchandising of lamps.

### MANY CENTRAL STATIONS ALREADY ON MERCHANDISING BASIS

If central station companies will refer to the report of the lamp committee of the National Electric Light Association for last year, they may be surprised at the information, some of which discloses the fact that 269 companies (61 per cent of those reporting) merchandise only, that 132 (30 per cent) merchandise and fursult of a utility commission ordering nish free renewals, two supply free renewals only and do not merchandise or sell lamps. The remaining thirty-four companies do not handle lamps in any manner.

If Mazda lamps can be universally sold throughout the various cities wattage cut down by smaller lamps and stores, as gas mantles are to-day, and a lot of other imaginary things. so that a customer desiring a Mazda Within the past few days on a lamp would merely have to run visit to New York, in conversation around the corner to make the purwith a lamp manufacturer, he told chase, say at the electrical contractor's store, I believe it would do the careful detailed record of all the lamp whole electrical industry a world of "Lighten the Labor of the Home"

# Creating Demand Through the Dealer

A Co-operative Plan of Promoting Sales That Has Met with Marked Success in the Minneapolis Territory

motion I'd make things

Perhaps such a jobber does breathe, but he is a difficult fellow to locate. Also the jobber who really gets what he believes is a fair amount of the manufacturer's money to spend in sales promotion is not frequently encountered. But occasionally one finds such a man.

One such is W. H. Vilett, president of the Sterling Electric Company, a combination jobber and dealer firm at Minneapolis. And it is on the success the Sterling Electric Company has made of its co-operative merchandising plan that this story hangs.

It started in this way. A washing machine manu-

facturer, whose product was comparatively unknown, came to Minneapolis to sell his wares. As a possible customer he approached the Sterling Electric Company. After some dickering he agreed to give the Sterling Company \$500 to spend on local sales promotion, and the Sterling Company agreed to handle the line and to start its purchases with an order for a carload of the comparatively unknown washers.

When the first shipment arrived a part of the \$500 was spent in judicious advertising and the company's sales force was put to work at selling washers.

They did their job well, for in

soul so dead, who never to him- last year they made a \$38,000 busi- uct; and third, he had the assurance self hath said, "Believe me, if ness. The bogey for this year is that all of the prospective business I had the money that manufacturer double that amount, and the manu- brought to light by his advertising spends on advertising and sales pro- facturer who was unknown before would be intelligently and forcefully

Here is "a house within a house"—The electrical bungalow within the store of the Sterling Electric Company, Minneapolis, where the larger electrical merchandise is sold. The classy little porch lamp is also a signal light; when it is lighted the sales force knows that a "prospect" is being shown goods inside, and so does not interrupt the busy salesman.

he went into the Minneapolis field through this dealer is now very well intrenched in the Northwest territory. The same manufacturer has also gained prestige in other quarters on account of the marked success which has been achieved by his Minneapolis agent.

"PULLING" IN CO-OPERATION WITH THE LOCAL DEALER

Looking at the proposition from a local standpoint, the washing machine manufacturer secured from the dealer something the average specialty manufacturer does not get from his agents.

First, he secured the top-notch a short time the first carload order effort of the local sales force; was followed by another, and then an- second, he got the full value of the other. In fact, the company's wash- local business reputation of a known chines was a carload lot.

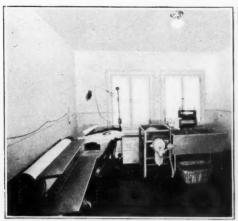
REATHES there a jobber with ing machine sales have grown until concern back of his unknown prod-

followed up without additional cost to him-all points of mutual value.

The dealer, on the other hand, was enabled to put on the kind of real advertising and sales campaign which would build business prestige for him in the trade and which would give him an entering wedge into houses for the retail sale of other goods besides washing machines. This entering wedge is made more effective by making the price for cash payments and time payments identical. leads most customers to accept the deferred payment plan, which Mr. Vilett believes makes the customer think favorably of the Sterling Electric

Company in the months during which payments are made.

So much for the company's experience in washing machine sales. "If the plan worked so well with that device it ought to work with other goods," argued Mr. Vilett. proposition was explained to an ironing machine manufacturer. concern agreed to allow the Sterling company \$350 for advertising and to send professional salesmen and demonstrators to inaugurate the campaign. Prior to this time the Sterling company had been selling one or two ironers a month. Last year they sold seventy machines and the 1918 bogey, with the appropriation somewhat increased, has been set at 300. The last purchase of ironing ma-





The laundry is the most important room in the building from the standpoint of revenue production. The company's bogey for the year was 800 washers and 300 ironing machines. One reason it is possible for this electrical jobber and dealer firm to sell electric ranges is because the president of the company and some of the sales people have electric ranges.

worked out with manufacturers of ranges, except that the amount which the Sterling company receives for cleaner promotion depends on its sales. Last year's business amounted to 1100 machines. The bogey for 1918 is 2000.

### SELLING APPLIANCES BY SEASONS

Now ordinarily it would be expected that the interests of four manufacturers would clash in attempting to work this same plan through the same dealer. The fact that each of the four lines, washing machines, ironing machines, vacuum cleaners and ranges, are considered seasonable in the Minneapolis territory prevents this conflict.

Each manufacturer gets the top effort of the sales force when he most needs and most wants it-in his peak season. In fact, the plan from the manufacturer's point of view-provided he can find the right kind of dealers to carry out the plan -seems to have only one big drawback. It tends to give him distribution of his product through a few important arteries, the severance of any one of which would be seriously felt.

From the standpoint of the dealer the plan seems at first to be open to the objection that it prevents carrying more than one manufacturer's line of any certain product. This. of course, limits the customer's chance of choice. But the Sterling company sees this as an advantage rather than a disadvantage.

The salesman, it is argued, when he has several lines to sell will usu-

The same program has been ally try to first sell his favorite. If he sees he is failing in this he will vacuum cleaners and of electric fall back on another line. When he adopts these tactics his offense is decidedly weakened and he usually

> On the other hand, when he has but one line to sell he knows he has nothing to fall back on. He must sell the article on which he starts his talk or lose the sale entirely. The full knowledge of his position in this case stiffens his offensive and helps him sell.

Moreover, there is a tremendous saving in investment to the dealer and a consequent increase in turnover when two or three lines are replaced by one line of goods. The records of the Sterling company illustrate this point.

effective the Sterling company has bungalow inside its store building on be vastly increased."

the second floor. It is a life-sized, four-room cottage complete in every detail. Its laundry contains the washer and ironing machine; in the kitchen is the electric range; in the boudoir is a vacuum cleaner, heating pad and other electrical appliances for milady's toilet; the heating devices are shown in the dining room. This bungalow cost \$2,500, exclusive of salable goods used to furnish it.

It is used primarily as a quiet and appropriate demonstrating suite. The caller who asks to see one of the larger pieces of merchandise is taken to the proper room in this cottage. There the salesman has an uninterrupted opportunity to tell the full story of the device. To give positive insurance against interruption a red pilot light is placed outside the door of each room. This is lighted by the salesman as the prospect enters. While it burns no one else may enter. The room containing the smaller devices was added to enhance the general effect and to give the salesman an easy way to show the customer "something else" after the first inquiry is satisfied. This often results in additional sales.

As the result of his company's successful venture, it might be supposed that Mr. Vilett is opposed to national popular advertising on the part of the manufacturer. The truth is, however, he is not. "I do not think," said he, "that the manufacturer should eliminate national popular advertising. But I do think that To make its sales efforts on these if he would take 50 per cent of his four favored lines of goods more appropriation and spend it through live dealers doing local advertising recently erected a complete electrical in live towns his actual return would





It is rather unusual to see a vacuum cleaner demonstrated in the boudoir, but if you just stop and think a minute you will see that a cleaner which will successfully clean a bedroom will encounter little trouble elsewhere in the house.

While this dining room is not used as a regular sales room for heating devices, it is a clever adjunct to the rest of the bungalow and gives the salesman an exceptional opportunity to show a customer "something else."

### Price Differentiation on a Basis of

# Quantity and Service

### "Fundamentally Sound, Logical and Fair"

E. A. EDKINS

Chairman Commercial Section, N. E. L. A.

Mr. Gibson's "quantity on single order" plan is fundamentally sound, logical and fair. Some critics will endeavor to dispose of it with the phrase, "utopian," but there are quite a number of generally approved practices in the business world to-day which would have been considered utopian fifty years ago.

Mr. Gibson's admirable statement of the case will undoubtedly precipitate a lively discussion; and when we actually get down to a serious discussion of price differentiations, the result is bound to be a long stride towards the sclution of this yexed question.

### Price Differentiation on the Basis of "Who's Who"

CHARLES E. RUSSELL
President Esco Electric Supply Company,
Albany, N. Y.

Mr. Gibson in Electrical Merchandising for March offers a plan by which he thinks the problem of price differentiation may be solved. He speaks from the manufacturer's point of view and his plan is simple, namely:

Don't ask a purchaser whether he calls himself a consumer, a retailer, a contractor, a jobber or a central station—or a mixture of two or more of these; just ask him how much he wants to buy either in bulk or value, and then make the price.

It may be of interest to know how this problem looks to one of those troublesome middlemen that Mr. Gibson finds so hard to classify.

The company I represent is of the well-known hyphenated genus Jobber-Retailer; deriving the first part of its title from the fact that it has a certain amount of money invested in a miscellaneous warehouse stock and pays the salaries and expenses of three traveling salesmen, and the latter half coming from the fact that we run a store where the public may taste our wares provided they show us first their penny. But we differentiate sharply between those who buy for their own use and those who buy to sell again either in unadulterated form or mixed with labor.

The price-differential problem is a double one. There is the price-forquantity feature which depends on cost of handling and the "who's who" feature which depends (in our case) on

Some Opinions of Manufacturer, Jobber, Central-Station, and Contractor-Dealer Readers on the Principles of "Quantity-on-Single-Order" and According a Single Set of Discounts to all Middlemen, Proposed by J. J. Gibson, Manager Supply Department, Westinghouse Electric & Manufacturing Company, in the March Issue of ELECTRICAL MERCHANDISING.

whether or not the buyer is a contractor or dealer. The latter half of the problem is here under discussion.

Assuming that everybody is familiar at least with the outlines of the "Goodwin Plan," we may start with the statement that the merchant who deals with the consumer is a retailer, no matter what he calls himself; and that he who sells to the retailer is a wholesaler, no matter what others call him. Between the raw material and the ultimate consumer stand the manufacturer, the jobber or wholesaler, and the contractor-dealer or retailer; three indispensable links in a chain, three inevitable steps in an economic function.

Of every dollar spent for electric irons (for example) 60 cents goes to the manufacturer, 15 cents to the jobber and 25 cents to the retailerroughly speaking. There is no objection to having the manufacturer take the whole dollar if he wants to do his own jobbing and retailing. There is no objection to his cutting out the jobber and selling direct to the retailer, but he will need to collect 75 cents if he wants to be adequately paid. The jobber-retailer wants to take 40 cents over his retail counter or he is robbing Peter to pay Paul.

### QUANTITY FACTOR MUST ALSO ENTER

Of course if a jobber can get retailers to do the retailing without pay (which is what the jobber does when he sells consumers at wholesale prices) it may look like good business for the jobber, but it is our belief (and on this belief the policy of our company is founded) that that sort of thing is not good business for the electrical industry as a whole. It falls hardest and quickest on the retailer but in the long run it hits the jobber too and it is as a jobber that I am strong for the "Who's Who" principle of price differentiation.

There are and must be sliding scales of prices based on quantity and this applies to a certain extent to retail business as well as to wholesale. A

complicated problem is involved there, worthy of the ablest effort the industry car produce. The problem of differentiation between wholesale and retail prices for a given quantity is a simpler one, but the "Who's Who" division is the simplest of all—it comes near being simplicity itself. Is the buyer buying for his own use? or to sell at retail to the public? or to distribute among dealers? The three answers are obvious.

One swallow doesn't make a summer; neither does one bell-hanging job, a basket and a five-dollar bill make an electrical contractor. No more does a stock worth a few hundred dollars and a plausible manner make a jobber. But the man in the electrical industry that can't be readily classified by a person of reasonable discrimination is a rare bird.

Assuming that "Goodwin has the right idea," it seems to me that the jobber is indeed the middleman—the man in the middle. In his attitude towards the manufacturer he is like the retailer looking to the jobber; towards the retailer he takes the manufacturerto-jobber point of view. To bring about the co-operation which we all agree is desirable and necessary we must have first some clear individual thinking, then a little courage and some of the spirit of the immortal Steve Brodie "who took a chance." Co-operation means forgetting ourselves once in a while and considering what is good for the industry as a whole. What is written here is put forward as a tangible means to the desired end: When arranging prices consider "who's who."

### Would Encourage Buying in Larger Quantities

GEORGE WEIDERMAN

George Weidermen Company, Inc., Electrical Contractor, Brooklyn, N. Y.

I am inclined to agree with Mr. Gibson's idea of having a single price list for all middlemen, whether retailers or jobbers. There appears to be no reason why a jobber should receive a lower price to transmit an order to the manufacturer, which is done in too many cases.

I also believe in the principle of "quantity on a single order." This gives the retailer an incentive to stock up the goods. With the present annual-quantity idea we are not buying in quantities, as would be the case if the price were attractive enough to warrant carrying a large stock.

### Functions of the Factors of Electrical Industry Need Be Defined

WARREN RIPPLE
President George Cutter Company,
South Bend, Ind.

Mr. Gibson's article deserves careful study. While he does not offer his plan as a panacea which will remove all conflict between the different factors of the industry, I have no doubt that it would greatly assist to that end.

It must be conceded by all that anything tending to define and establish the functions of the different factors of the industry and reduce the conflict which has always existed, should be encouraged. That the price of an order should be influenced by quantity is sound in theory and practice.

### Gibson Proposal Appears to Be a Special Plea for Manufacturers Alone

LOUIS KALISCHER

Chairman Greater New York District, N. Y. State Assn. of Elec. Contractors and Dealers

I have read with a great deal of interest John J. Gibson's article on "Price Differentiation on the Basis of Quantity and Service." The mere fact that the able manager of the supply department of the Westinghouse Electric & Manufacturing Company attempts to solve the manufacturer-central station-distributer-jobber-contractor-dealer problem in a carefully studied plan emphasizes the absolute necessity at this time for a workable schedule.

Mr. Gibson surely covers a great many of "the ills of the industry," but he himself says "The use of a quantity of individual items on single-order basis is not a panacea. It will not cure everything, for it cannot always be prescribed, but is the only constant we have in the midst of a weltering sea of variables." Now just what are these variables, the manufacturer's problem, the central station problem, the distributer's problem, the jobbing problem and the contractor-dealer problem?

The problems of the distributer and jobber in a geographical sense, are not the same everywhere. In New York, for example, they differ from those of a number of other localities. The same condition exists with reference to the contractor-dealer. And Mr. Gibson's problem of the purchase of meters by central stations may be absolutely solved by the "Quantity on a single unrevokable order" principle for the reason that the purchase of this article is practically limited to this field.

Mr. Gibson's analogy of the hardware clerk as the manufacturer, the electrical trade as the buyer, refers, I believe, to the electrical trade as consisting essentially of distributers, jobbers, central stations, contractor-dealers, and some classes of industrials, with the

manifold variations and combinations embracing portions of each class. It is no doubt true, that "reformation" has come to be the order of the day; in this, he agrees with the industry in general. He also agrees with the industry when he says "To have every price fair to all concerned would cure the ills that the trade is heir to." respectfully submit, however, that this cannot be accomplished until some of the manufacturers set their own houses in order. He fails to mention the manufacturer selling direct to the public, short circuiting the whole "electrical trade" or "middlemen." This would be absolutely fair with some class of apparatus which the Goodwin plan con-

### The "Quantity - on - Single-Order" Principle of Discounts Proposed by Mr. Gibson

The plan proposed by Mr. Gibson in his article in the March issue of ELECTRICAL MERCHANDISING (page 120) would make no distinction in the schedules of prices granted wholesalers and retailers, but would accord to all middlemen between manufacturer and final user—jobbers, dealers and contractors—a single set of discounts, to be applied in each instance on the basis of the "quantity-on-single-order" of one kind of goods purchased, instead of on "annual quantity."

With the purpose of opening a useful discussion on the fundamentals of price-making, ELECTRICAL MERCHANDISING invited the comments of well-known leaders in each branch of the industry on the principles set forth in Mr. Gibson's article. Of the number of replies that have been received, however, most have evaded an expression of opinion at this time, while definite comments by other readers are reproduced on these pages.

templates, and has provided for; and which plan, I have every reason to believe Mr. Gibson has in mind, when he says "There has been a great deal of discussion recently as to reorganization of the electrical industry so that every factor in it may be properly recognized. Many prominent and influential men...do not understand the plan."

A great deal of stress is laid on the legality of the whole question. I am not a lawyer, but I have always been given to understand that any agreement as to price is illegal, whether it be the Sherman law or the Donnelly act in New York State or the Clayton law which he refers to. This is under

stood perhaps by everybody in the United States, but let us read section 2 of the Clayton law, which he mentions and interprets as being a bar to any trade protection. "That it shall be unlawful... to discriminate in price... to substantially lessen competition or tend to create a monopoly in any line of commerce." (But the law also provides) "that nothing... shall prevent discrimination in price between purchasers... allowance for difference in cost of selling or transportation... in good faith to meet competition"; and "that nothing... shall prevent... in selling (or sellers)... from selecting their own customers."

Mr. Gibson recognizes this feature but dismisses it with the word "That it could not have been the original intent" and therefore assumes that the only solution is, his "quantity on single order" plan. Further on he points out cases where his plan does not work out so well, on account of their "slow moving," variation in size, type, finish, etc., and advises special treatment in these cases. Also in view of the fact that "Modern merchandising has developed a group of middlemen of many kinds and forms, large and small whose services must be paid for commensurately in a way that is fair to others as well as themselves."

Perhaps? "A proper combination may be worked out which can differentiate fairly among middlemen of all types and kinds." But does his plan accomplish it? If it does I fail to see it. His plan is a special plea for the manufacturer alone and if you will pardon me, almost a selfish one. As an example, the cantonments recently completed, the government, working on the principle of "quantity on single order" purchased huge quantities of all classes of materials, and no doubt the prices were low.

They went into the open market for their labor, and came very near disrupting the electrical contracting in-It worked out beautifully as dustry. far as the material phase of the proposition was concerned and Mr. Gibson surely knows what happened to the price of labor and the organized forces of the contractors. We are thankful that it was only temporary, but, for an every-day continuous proposition the public receives a direct benefit, by virtue of an efficient method of the distribution of electrical material; and efficiency is the order of the day.

There is another angle, in so far as it affects the manufacturers with particular reference to that class whose product covers a wide field of the industry. I believe it would be manifestly impossible to devise, a single system of sales, that would be satisfactory to all the elements, entering into the sale of electrical material from the manufacturer to the public. From the contractor-dealer standpoint, it may be set down as an axiom that the contractor-de-ler is interested:

1. In high-grade material, if for no other reason than self-protection.

2. He is interested in securing such materials as he may require at a proper time, to permit him to carry on his installation work efficiently and also with the assurance that the price that he purchases this material at, is, to a reasonable extent, on a parity with that of his competitors.

3. He is vitally interested in the recognition of the "wholesale and retail principle" as obtains in every other industry; as it would be obviously unfair to the contractor-dealer to have the material which he installs, sold to the consumer in the open market, at his purchasing price.

4. The contractor-dealer to successfully conduct his business must be in a position to secure any of the thousands of different items, which go to make up an installation, from a source that is in a position to render this service. All these materials cannot be carried in stock by the contractor-dealer; for the evident reason, that it would be an inefficient method, increasing the capital necessary to conduct the volume of business aside from its manifold difficulties.

### IS JOBBER'S STOCK TO BE USED ONLY AS A CONVENIENCE ON "PICK-UP" MATERIAL?

Does Mr. Gibson believe it fair and equitable for the contractor-dealer to buy conduit, wire and boxes from the manufacturer, and then use the supply house as a convenience for what is termed "pick-up material?" Surely Mr. Gibson knows that while the contractor's business from a jobber or house of supply, forgetting the term 'jobber" for the moment, for this class of material, may run from \$1,000 to \$1,500 a month, it may be composed of such items, and in such quantities that the major portion of them would show a net loss on the sale and the average profit, far below a legitimate return for an electrical business or otherwise? This method would certainly compel the distributer or jobber to conduct retail departments, to secure a profit sufficient to cover the losses sustained if the foregoing method were adopted; and, this is one of the features, of prime importance that the contractordealer is trying to have remedied; as we believe this business belongs to the contractor-dealer, that he is the man in contact with the purchasing public, and that he should be placed in a position to supply the public's demands.

Does Mr. Gibson believe that the only thing the contractor-dealer sells is manufactured material? While its importance is admitted, an installation may be completed with high-grade materials absolutely unsuitable for the requirements of the ultimate consumer. Does Mr. Gibson believe that the material itself is the controlling factor, and just so long as the price is right, that it is only necessary for the public to place his business with anybody

that is in a position to quote the lowest price; due to the "quantity on single unrevokable order" system? Contracting experience covering a number of years, proves at least to my satisfaction that he is in error. Surely Mr. Gibson knows that the prime difficulty in the past, has been the idea, which has been spread broadcast that electrical work should be installed, just as close to the cost price as it is possible to figure. This has brought about in a measure by the attempts on the cential stations to increase their loads and who in the past have absorbed their legitimate overhead on the sale of socket device material, in the general overhead of the company's activities. This method which had, I believe, been generally adopted by the various companies, may be classed as unfair competition and I am happy to say that I believe in the very near future, merchandising by central stations will be so segregated that it will be compelled to carry its own overhead.

Mr. Gibson must realize that the electrical equipment of a building approximating 21/2 per cent of the cost of the tuilding operation is not a determining factor as to whether the operation is to be consumated or not. The time for any such consideration has surely passed. It is not necessary at this time to justify the necessity, desirability or efficiency of an adequate electrical installation in every building.

What the business needs at this time is a stabilizer. The cost of the material, within reasonable limits is not a factor in so far as the contractor is concerned. To repeat, the ideal conditions from a contractor's standpoint would be, to be placed in a position to purchase his material in the open market, from the jobber at a price equal to that of his competitor, and in the sense I assume that this competitor is an equal credit risk. Remove once and for all the purchasing problem from the contractor-dealer, permit him to concentrate his efforts on the securing of business, prosecuting it with energy to the end that a fair profit may be returned on his efforts.

I beg to quote from a little talk I made in 1914 on the contractor problems, "The contractor is the only one of the units that is brought in direct contact with the manufacturer, the central station, the supply house, the consulting engineer, the inspection departments and the purchasing public, a factor that surely is deserving of some consideration" and it behooves every man in the industry to do his utmost, to direct the various elements of the electrical industry through easy navigable channels, "with the fundamental idea, that the transaction from manufacturer or wholesaler to contractor, does not complete the sale. The sale is not completed until the product is in the hands of the public, you have received your money, taken care of your overhead, and have something left for a profit."

### Proposed Plan, While Removing Many Objections, Might Create Others

B. E. SALISBURY

President Pass & Seymour, Inc., Solvay, N. Y.

I am glad that such questions as price-making are occupying a prominent place in the minds of those interested in the electrical industry, and that the press is giving considerable space to the discussions, for I believe everyone recognizes that the present system has its faults. I believe, however. that eventually it will be necessary to have a great deal of discussion and many side-lights on this question before it will be safe to reach any definite conclusions. Such articles as those by Mr. Gibson and by Mr. Goodwin will help along this line very materially.

It would appear that a fundamental principal of merchandising would be that the quantity bought should deter-mine the price. There are, of course, mine the price. There are, of course, bound to be modifying factors, such as the service rendered by a distributer to a manufacturer in carrying ample stocks so as to have them available for quick delivery, and in promoting the sale of the manufacturer's goods.

It has been the custom in some branches of the electrical industry to base the price more on the estimated total purchases of all kinds of goods in this line for a period of time rather than on the size of any particular or-der that may come in. This has reder that may come in. sulted in more or less abuse and has left the way open for practices which, to some extent, at least, have been detrimental to the interests of all parties concerned. If the plan proposed by Mr. Gibson were generally adopted it would doubtless remove many of these objections, but it might make others which would be equally serious.

Out of all this discussion there will doubtless come in due course of time a plan of merchandising which will have a minimum of defects, but I do not consider that at the present time the atmosphere has been sufficiently cleared to make it possible to definitely line up behind any of the plans that have so far been proposed. Probably the correct solution will be more in the nature of a compromise between the new ideas and the old practice.

### Some Practical Aspects of Trade Co-operation in Introducing

a New Line

FRED B. ADAM
Chairman Electrical Merchandising Committee, National Association of Electrical Contractors and Dealers

I agree with Mr. Gibson that at the present time we are suffering from ills that are a legacy from the bad habits of the past, and I feel sure that the Goodwin Plan will build up good business methods and eliminate such ills in the future.

In our general efforts for improvement we must not be discouraged if some individual condition locally, or some entire local situation develops that makes it impossible at the present moment to cure the ills of the indus-There are always likely to be such local conditions that we will have to contend with and no general policy will be able to prevent it.

I agree with Mr. Gibson that the "one-price" plan of doing business is the only right one. It is being estab-lished in every line of business, and, according to Eddy, is absolutely necessary when we are dependent upon various employees to act for us in making the sale to the customer. In the ancient days when the motto was "Let the buyer beware," the customer was up against the proprietor's cunning, experience, and decision in making the trade, but to-day in modern business this is impossible with the innumerable employees that the modern business house has to serve its customers, the public. The sooner the people or managers in the electric business appreciate this fact and decide upon a one-price condition in their business the sooner they will get away from a considerable detail of being asked by their clerks what price to make this, that, or the other customer, and the sooner they can figure out in their sober moments what is a fair deal to themselves and their customers, and insist that their employees carry out this decision faithfully.

### NEGOTIATIONS CONSIDERED VITAL

I gather from Mr. Gibson's article that he agrees that if the manufacturer or producer could always get in touch with the user there would, as a rule, be a sincere desire of fair play by both. I am firmly of the opinion that the manufacturer and the user should always have the right to negotiation as to the price that the manufacturer should make and the user pay. The manufacturer is interested on account of his investment in machinery, buildings, and other conditions necessary for the production of the article to be purchased by the user. The user is interested as to the question of whether he can purchase such an article at the price. Negotiations are vital and despite all arguments to the contrary, should be final and binding on both.

Now to give you my idea of the various phases of the conditions of manufacturer to consumer I must make some examples.

Some twenty years ago we will say a factory started in New York. factory did some selling in other lines and finally decided to manufacture one In the City of New York they sold this article to the consumer at retail and they sold it to the contractor at wholesale, there being no necessity for a wholesaler in New York. After they got their home town well organized they had a representative make

a trip over the country and, we will say, in Detroit he made connections with a contractor, and that contractor proceeded to use this material and specify it wherever possible. In Pittsburgh, not knowing of a contractor there, they made connections with a jobbing house. This jobbing house promised to get in touch with the trade and introduce the article. In St. Louis, in the same way, they got in touch with a jobbing house and the jobbing house made a general distribution of the entire West. The manufacturer now had a condition in his home town of having the retail business himself, and doing a jobber's business to the contractor. He also sold direct in other towns to the contractors, who on account of specifying this line of material and not getting all of the jobs that the material was specified on, made it necessary for some other contractor to purchase the material. These contractors decided that they would not purchase from the fellow that specified a new line of material and it naturally went either to the manufacturer, or, as a rule, to the local jobber.

Here was a condition worked out where the jobber comes to the manufacturer and asks for the price of jobbing and distributing this article. manufacturer agrees to allow a jobber we will say in Detroit to handle or distribute this material for him but particularly insists that the contractor who has introduced his line in Detroit must be protected because of the valuable work that he has done to date in that territory.

The jobber agrees to this but in two or three years he has worked up a considerable business on the manufacturer's line and he comes back to the manufacturer and says that he must have a differential on all business sold out of Detroit. He entirely forgets that if it had not been for the contractor originally working up the business in Detroit he would propably not have any of this business, but the jobber has a short memory and insists that he must be protected over all of the trade. This is one of the injustices that we have to work against and it is a question of

(Concluded on page 215)

### Getting Ready to Distribute Third Liberty Loan Posters to the Electrical Men of New York City



To sell bonds of the Third Liberty Loan among the electrical men of New York City.

To sell bonds of the Third Liberty Loan among the electrical men of New York City, an active canvassing force totaling more than 500 volunteer solicitors and salesmen has been organized by the Liberty Loan Electrical Industries Committee of Greater New York, of which Theodore Beran is chairman, James R. Strong is vice-chairman, E. Donald Tolles is secretary and H. C. Calahan, assistant secretary.

Louis Kalischer is chairman for the contractor-dealer division; George Patterson for the jobbers' division; J. Nelson Shreve for the electrical manufacturers; E. D. Kilburn for the manufacturers' branch offices; Charles Crofoot for the manufacturers' agents; and William Walsh for the electrical workers. A. Goldman heads the central station auxiliary committee; J. M. Wakeman the electrical societies committee, and J. C. Forsyth the electrical inspectors' auxiliary, each of which is co-operating with the principal divisions. O. H. Caldwell and James H. McGraw, Jr., of Electrical Merchandisms are in charge of speakers and publicity.

The general committee is undertaking to reach every electrical association or society in New York City with speakers, posters and literature, and to secure, by individual solicitation, the subscription of every electrical man in the metropolitan area. The illustration shows the salesroom of Stanley & Patterson, New York City, being used as distribution headquarters in getting ready the hundreds of Liberty Loan posters, cards, circulars and buttons passed out to electrical men to aid during the campaign.

# Electrical Merchandising The Monthly Magazine of the Electrical Trade

Volume 19-April, 1918-Number 4

PUBLISHED BY MCGRAW-HILL COMPANY, INC., NEW YORK

### Who Can Be Members?

WHO-ALL are eligible for membership in the new National Association of Electrical Contractors and Dealers?

No question has been asked so often as this since the new National association was launched at New Orleans. And no question is more important.

Anyone having as his principal business the installation or retail sale of electrical merchandise is eligible for membership in the new association. Electrical contractors, electrical dealers, electric shops, fixture dealers, etc., are all entitled to full membership.

Any merchant handling electrical goods as a side line is entitled to associate membership in the association. Eligibility here includes jobbers with retail departments, central stations handling appliances, department stores, hardware dealers, drug stores, variety merchants, household stores, and others who carry electrical merchandise in addition to their regular stocks.

To be useful as a force for education and trade benefit, the membership of any trade association should be liberally inclusive. The new National association was wisely made so under its new constitution. And having established broad eligibility lists, it is the duty of its officers to see that these "prospect" lists are shortly converted into membership lists running into tens of thousands.



### Why Electrical Goods Should Be Sold by Electrical Men

A HARDWARE dealer sold a toaster. He told the purchaser it could be operated for 2 cents a day. The purchaser believed the statement. He placed the toaster in continuous operation to heat a small chicken coop. His electric light bill for the following month was \$32. He kicked to the electric light company. The condition was discovered by the electric company's man, explained and remedied.

The moral is that a certain amount of electrical knowledge must be delivered with every piece of electrical merchandise sold. The electrical merchant has that knowledge. If other merchants expect to compete with him, they must acquire this sort of knowledge.

### The Contact That Makes Friends

IN THE course of the discussion at the Ohio New-Business Men's recent meeting in Toledo, an interesting incident was cited to prove how often lack of harmony between the central station and the contractor is due entirely to the absence of a friendly contact.

In this city there was a contractor who was generally disliked in the trade. He had never shown any willingness to make friends, he was a "roughneck" as the speaker termed it. Yet, one day in an emergency it was necessary for the president of the local central station to send for this man and appeal to him to lend a hand. There was a conference in which all the officials of the lighting company gathered around a table with this man and they were, every one of them, surprised to find in him a rough diamond worth polishing. He met the company more than half-way. In other words, once they became acquainted, they found out that they could be a friend to this man just as easily as to any other.

There, after all, is the only obstacle that stands in the way of prosperous co-operation in nine-tenths of the cities where the electrical industry lacks harmony at the present time.

### Make Your Advertising Fit Your Business

THE modern merchant makes out his advertising budget on the basis of his expectations. Taking the past year's business as a basis, an estimate is made as to how much of each line of merchandise will probably be sold during the coming six months; then sales expense, including advertising, is predetermined in accordance with this estimate. In the case of specialties like vacuum sweepers, washing machines, farm lighting outfits, etc., the advertising expense is figured at so much per machine. In the case of more general lines of merchandise, the advertising is a percentage of total business.

The advantage of making up an advertising budget in advance is that it enables the merchant to avoid two great pitfalls—that of cutting out all advertising when some sudden and temporary slump in business occurs, and that of "running wild" when sales take a sudden spurt. Successful advertisers are those who plan far in advance and who keep at it consistently. This does not mean that advertising will not be affected to greater or less extent by long and serious depression: it simply means that advertising should not be started and stopped spasmodically whenever the merchant feels depressed or elated.

### The Knock That Boosts

A MAN who won national fame through being denounced used to say, "If a man talks about you, put him on your payroll. It doesn't matter what he says so long as he talks about you."

We should look upon the attacks of our business rivals and critics in much the same light. A hammer in the hands of a competitor is sometimes as good as a horn in the mouth of your own ad man.

### **IDEAS FOR THE MAN WHO SELLS**



Plans, Schemes and Methods to Increase Sale of Electrical Goods



### Cooking Recipes to Push **Electric Range Sales**

T. H. Kettle of the Minneapolis General Electric Company has some very interesting things to say in connection with pushing the electric cooking idea through a systematic and well-organized system of advertising. A "recipe service" is a feature of this advertising, the recipes being furnished by the company's electric cooking bureau under the supervision of Miss Bernice Bell, a domestic science expert. Mr. Kettle emphasizes the wonderful power of reiteration and repetition in advertising such as his company has employed through various channels in selling the electric range. The recipe cards are mailed weekly to a selected list of prospects, advantage

American mail

'electric' and the other the name of your company, and such a series of mental impressions must have a cumulative force which will eventually be felt if handled scientifically."

### An Electric Luncheon to Demonstrate Dishwasher and Other Appliances

Demonstrations of single appliances are becoming rather ordinary. Here is an idea for demonstrating a complete electrical household equipment that has novelty.

Invite a selected mailing list to take lunch in a home electrical at your store. When the guests have assembled have the demonstrator prepare a light luncheon electrically. When everyone has finished, gather

# Electricity

Even the clergy possess the vulnerable point of vanity, as was proved recently by a new-business man of the Denver Gas & Electric Light Company. As the matter turned out the devil will be fought. and doubly so, with electricity.

Fighting the Devil with

The salesman had endeavored to interest the clergymen of two Seventh Day Adventist congregations in wiring and installing fixtures in their churches, but both were slow to close contracts. It was finally decided to get both ministers -one being white, the other blackin the office at the same time, when jealousy might win the day.

The clergymen appeared at about the same time and greeted each other cordially, neither knowing his ecclesiastical rival was figuring on extra illumination. The salesman excused himself and took the white man to one side, and, sniffing the reason for the other's presence, he could not sign quickly enough. When he had departed the colored minister demanded to know what style fixtures his brother had selected, and on being shown chose a more expensive assortment.

### RECIPE NO. 12 PLUM PUDDING e. soft bread crumbs

t. cloves t. cinnan t. sait c. suet c. molass 1 egg
% c.milk
% c.currants
% c.raisins
1 T.vaniila

METHOD.

METHOD.

Chop the suet and sprinkle with 1 T. of flour; ndd the dry ingredients (except sodis). Add the egg nad milk beaten together, vanilia, and sodi disnojved in the molasses. Fill a well greased pudding mould one-half full. Steam two hours. Serve with

Electric Cooking Bureau eapolis Gen. Elec Co. T. S. 44 210

One of the attractive and timely recipe cards sent out weekly to the prospective buyer, who is also requested to consider the company's cooking bureau staff as her personal kitchen counsel

being taken of the idea that it is impossible to give the prospect too much of a good thing, or that the follow-up can ever be overdone.

WRITING TO THE BOYS

The right type of American soldier is a home-loving and a home-loved boy. Therefore he will want to hear from you just as often as you can write—real newsy, interesting letters. Have Miss Bell explain how you can have more time for writing to the boys if you do your cooking in an Electric Range.

"Such a series of recipe cards." adds Mr. Kettle, "virtually places a fence around your prospects, tending to keep the prospect's mind in your direction at all times, and allowing competitive products and competitive services little opportunity to get a footing. They also cause the prospect every time she thinks of cooking, to automatically and unconsciously think of two words-one

the dishes into an electric dishwasher and demonstrate the speed and ease with which they are disposed of. While the dishwasher is operating, the table linen can be washed in an electric washing machine and a vacuum cleaner used to whisk out of sight the remaining crumbs.

The demonstrator should lay particular emphasis on the time she is saving by these electrical means; and the ease and composure with which she is able to take care of her guests unassisted save by appliances will furnish an excellent object lesson.

### Selling an Extra Flashlight Battery

"I want to buy a flashlight," announced a country boy who walked into an electrical store in Cedar Rapids, Iowa. The dealer sold one to him. Before he did so, however. he had to answer a question. The boy queried: "How long will this battery last?" "That depends," parried the dealer. "Some last quite a long while, others don't last so long. Dry batteries are not guaranteed.'

The boy decided to take the lamp and was hauling out the money when the dealer asked: "Want to take an extra battery with you?" "Sure, I guess I better have two of 'em," was the come back. But the dealer didn't take the boy's guess for an answer. He asked him how he was going to use the light. When he learned that it was to be subjected to steady or frequent burning he advised against the purchase of the extra battery, stating that it would deteriorate even if not used. By

this plan the dealer does catch many extra battery sales where they are justified, and even if his honesty dictates that he shall advise against a sale he establishes in the mind of his customer an unconscious idea of his fair dealing and also registers the fact that fresh extra batteries can be bought at his store at any time.

### Divine Rights in Business

In the movement now taking definite shape in the industry which has for its purpose the strengthening of the position of the electrical dealer and contractor we sometimes hear it said that merchandising matters

tric vacuum sweepers as a side line and that a large majority of these give considerable attention to the business. Various clever selling plans are used by these merchants; as, for example, giving each rug purchaser a certificate entitling her to have the newly-bought rug electrically cleaned, thus paving the way for a demonstration of the sweeper in the customer's home.

The point we would make, however, is not that the carpet dealer is clever or aggressive in selling electric sweepers, but that so very large a percentage of such dealers—almost 80 per cent of the 2000 examined—are in the business to some extent.

weeks is carried on, indicate the following as the cost per week of cooking with coal, wood and electricity.

With coal at \$11 per ton,  $88\frac{1}{2}$  cents per week; with wood, fir at \$11 a cord, 89 cents per week; with electricity at 3.85 cents per kilowatthour,  $86\frac{1}{2}$  cents per week.

## Show the Customer How the Range Actually Works

By F. J. ALLEN

Westinghouse Range Specialist

I have seen many range sales lost because of failure on the part of the salesman to go into some small detail and explain its why and wherefore, thereby permitting the prospect to leave with a question in her mind.

Every buyer wants to know the new and, until understood, startling reason for things—especially so with a range.

"The range turns itself on and off!" "How?"

"The greater portion of our cooking is done on stored heat!" "How?"

"Biscuit mixed and placed in the oven the night before is perfectly raised, cooked and browned upon entering the kitchen the next morning!" (Gasps.) "How?"

"Meat, potatoes, carrots and onions can be cooked at one time in the same oven, permitting great economy of operation, and the taste of the onion will not taint the other foods!" (More gasps.)

Now if the salesman goes on with such startling statements, without explaining and showing how they are made good, he will either give the impression that he is "drawing the long bow" or the prospect will feel that the range is so complex that she can never, never learn to work it.

The old saying that "seeing is believing" is most applicable to the education of the public in the practicability of the electric range. I am convinced that an investment in comprehensive work-a-day language lectures, backed with actual cooking demonstrations, will bring about more sales than many times the same investment in merely putting ranges out on trial. You can talk yourself "black in the face," and all your words won't matter a bit until you produce the results, or tell of some one in town who can.



The national government's Third Liberty Loan Campaign is now well under way. Some of the potent influences intended to stimulate the campaign are shown in the window posters displayed above.

would run more smoothly if the central stations would abandon all merchandising endeavor.

Those who hold this view declare that the appliance business "belongs" to the dealers by a sort of divine right. They assert that the central stations which do merchandising are "taking business away from the electrical dealer." They claim, at least by indirection, that if the central station would but close up their appliance shops the business would fall into the laps of the waiting dealers.

But is this true?

An investigation was recently made to ascertain how much of the vacuum sweeper business is done by department stores and others who deal in carpets and rugs. Of 2128 such merchants approached, it was found that 1698 are handling elec-

And we are constrained to inquire whether the electrical dealers referred to will claim that this business also "belongs" to them, and if so, what are they going to do about it—except to go after it the same as any other merchant does when he sees that he is not getting his share of a merchandising opportunity.

### Cost of Electric Cooking at 4-Cent Rate Comparable to Cost with Coal

Experiments conducted at a "Practice Cottage" at the Washington State College, where nearly every kind of electric heating appliance is used under widely varying conditions and where the cooking of three meals a day over a period of a number of

### Oh, Bee, Where Is Thy Sting! —A Vacuum Sweeper Story

BY STUART ROGERS

Valley Electrical Supply Company, Fresno, Cal.

It happened that one of our wiremen was wiring a country home. Everything was lovely until he went into the garret to wire the second floor. It was then that the trouble began. Four swarms of bees had possession of the place, and possession in this case was one point better than nine points of the law. Poor Mr. Wireman didn't know what to do. He was telling us about his troubles when our vacuum sweeper demonstrator, Mr. Platner, came in. The story was told again, and the Hoover man said: "I'll get those bees for you. The Hoover gets all it goes after." So he decided to take a suction sweeper with him next morning.

The bees had one hole from which they traveled in and out, mostly. The sweeper was stationed in a window of the second floor, the hose was attached to the machine, and a hook was placed on the other end so it could be hooked to the wall.

The cleaner was started and the bees began to fall. One by one and two by two they disappeared through the hose. The machine ran for three days. I don't remember how many times the bag had to be emptied, but anyway there were enough bees caught so that the wireman was able to proceed.

As each little bee went through the machine it deposited a little honey. After the third day the machine froze tight during the night. Too much sweet stuff. When the machine was taken to the shop and cleaned up it was just one mass of hard honey and bees.

### Selling Washers Under Difficulties

By H. L. PATTERSON

Two incidents which occurred shortly following our festival appliance show at Huntington, W. Va., brought out the fact that our prospect list is not only good but that our salesmen are brim full of real pep and enthusiasm.

The salesman who went out to deliver the sewing-machine motor to the woman who was the winner in the contest recently conducted by the

Consolidated Light, Heat & Power Company at Huntington, W. Va., noted on the coupon which she had filled out that she was interested in a washing machine. So he took a washer along with him, and after showing her how to use the sewingmachine motor turned in and demonstrated the washing machine and closed the sale for it. As the company had run a large ad in the Sunday paper announcing the winner of the sewing-machine motor, quite a number of the neighbors came in to see the motor while the salesman was demonstrating it, and most of them stayed for the washer demonstration. That salesman believed in making

one house to the other, via several fruit trees, chicken sheds and back-yard fences, made his washing-machine demonstration, and then sold the woman the washer and an electric iron, and arranged with her to have the house wired immediately.

### Teaches Women to Make Own Lamp Shades

W. E. Quillan, new-business manager of the Lorain County Electric Company at Lorain, Ohio, has discovered a profitable way of increasing the sale of portable lamps. Silk lamp shades appeal to the decorative



These posters (only three of a comprehensive series are shown here) used in combination with the national colors make a splendid window display, and while their message is patriotic only, they also attract attention to the dealer's store.

hay while the sun shone, so he gathered in the names of all in attendance at the demonstration, and the following week sold two more machines in the same neighborhood!

In another instance the salesman, on following up one of the coupons filled in by a woman who wrote she was interested in a washing machine, found her residence to be in a rather thinly-settled part of the town, and not wired. Undaunted, he arranged for the demonstration, and appeared on the scene with the washer and a roll of lamp cord, loom, knobs, etc. After getting ready for his washing demonstration he went to the nearest house having electric service, and obtained permission to make a connection ahead of the meter. Permission to make the connection being given, he erected his temporary transmission line from

tastes of most women, but the expense often balks them. Mr. Quillan solved the problem thus:

He obtained a young woman of Lorain with needlework abilities and sent her to a needle school in Cleveland. When she returned he opened a department of instruction for home silk shade manufacture. The company laid in a line of wire frames, silks and braids, so the pupils could buy the materials at the place of instruction, and success was immediate. There are now often as many as thirty women in the Lorain County Company's office, in one afternoon, buying material and working on shades. Purchases of lamps to fit the shades have been numerous. The instructor makes shades for the company during her spare time, and the profits on these more than pay her salary.

### THE JOBBER'S SALESMAN



Ideas Other Men Have Used to Help Them Sell



### How the Salesman Can Help says just about this: "If I refuse to Uncle Sam

Selling goods is an aggressive job. Men who find enjoyment in overcoming obstacles, in succeeding in the face of competition are the men who make not only excellent salesmen but soldiers of a high type. So it was natural that the war should have thinned the ranks of the electrical jobber's traveling men.

Those who are left are still civilians for the best of reasons. Yet many of them express in no uncertain terms their regret that health or age or family obligations stand between them and military or naval activities. However, their opportunity to serve the interests of the United States is quite as large as that before their former associates now in uniform.

For one thing, they can help to silence criticism of the government, and in the case of too energetic critics, turn their names over to the Department of Justice for special attention. Traveling men have helped to round up many of the Kaiser's helpers in this country since the war has had a larger meaning for us. The sale of Liberty Bonds and Thrift Stamps can be helped a great deal by an opportune word here and there from the salesmen; and those hotel managers who will persist in serving meat and wheat against Mr. Hoover's orders will give up the practice very quickly if their names are reported.

The electrical traveling men were among the first to urge systematic team work in the electrical industry, and the promotion of national team work is a job they are peculiarly fitted to handle. Through it they can make their bit a big one.

### On Being Insistent

Do you know what many retailers say to themselves when a new traveling salesman's presence is announced and when perhaps the time is most inconvenient for listening to a long introductory story? Well, the dealer

see this man, he will probably be disagreeable about it and he may develop a grudge against me or my store.

"I may lose a desirable opportunity. And yet, if I see him and after finding out what his proposition is, excuse myself without allowing him to go through his full line of argument and show his full line of goods, then also he will be disagreeable."

Isn't the greatest argument in favor of courtesy and a willingness to allow the dealer to judge whether he has time to spare or not, the fact that there are just enough salesmen who act the other way so as to give an impression that there are many

The sale you may make by sticking and hanging may be worth much less than the good feeling to be gained by withdrawing politely just a little before the prospect's patience is exhausted.

### Keeping a Line on the Trade

Orders that the jobber gets from his salesmen usually give completely all of the information needed to make intelligent selections and shipments of goods. However, this is not so with the orders that come directly from the customers.

For this reason it is sometimes handy to have available files of information to supply points that may be lacking on the mail orders. The accompanying blanks show how this is done by the Northwestern Electric Equipment Company. One set of forms covers the central station proposition and the other covers the telephone company and dealer situation.

The company's salesmen use these forms annually to assist in correcting the company's old records. When a new town is visited a complete set of these forms is turned in covering the trade in that town. This, of course, gives the Northwestern Electric Equipment Company complete information on the trade in the territory it covers.

With these records in its files the company is in shape to fill orders promptly even under difficulties. If, for instance, a customer neglects to give frequency and phase ratings on a motor, these data can be taken from

m Name e Man to	see			His Titl	e		City Telephone Company
W. Buz	zer to		Others a	nd titles			Name
		000	0000				CONTRACTORS AND DEALERS
	No.			Volts	Cycles	Make	(1) Firm Name
		Total Kw.	Phase				(3) Firm NameMan to see
		ALW.	A Huoc				
		-	-				
en. A. C.							Maintain resale on htg. appllances? Maintain resale on lamps?  Do contractors and dealers buy htg. appliances or lamps from CS?
on. D. C.		1					Do all advertise? State who do
					1		Do other dealers in town handle electrical goods?
onse volt	for heat	ing appa	Power				If so, give firm names below:
onse volt	for heat	ing appa	ratus . Night ci	reuit			If so, give firm names below:
ouse volt urce of p	for heat ower	ing appa	ratus . Night ci 24-hour	reuit			If so, give firm names below:
ouse volt urce of p	for heat ower	ing appar	ratus Light ci 24-hour neoming	rcuit circuit. line V			If so, give firm names below:
ouse volt ource of p peration	for heat ower on batt	teryI	ratus light ci 24-hour ncoming	reuit circuit. line V	.Phase.	.Cycle	If so, give firm names below:
ouse volt ource of p peration	for heat ower on batt	teryI	ratusiight ci 24-hour ncoming	reuit circuit. line V.	Phase.	.Cycle .	If so, give firm names below:  Auto Supply Dealers
ouse volt nurce of p peration ase reet serie	for heat ower on bati s, large	teryI	ratus light ci 24-hour ncoming	rcuit circuit. line V. line voltFilm Adi.	Phase.	.Cycle .	If so, give firm names below:  AUTO SUPPLY DEALERS  (1) Firm Name Man to see. (2) Firm Name Man to see.
ouse volt urce of p peration ase reet serie	for heat ower on bati s, large	teryI  LA  or small	24-hour neoming MP DATA	reuit circuit. line V. line voltFilm Adj. np. ratin	Phase.	.Cycle .	If so, give firm names below:  AUTO SUPPLY DEALERS  (1) Firm Name
ouse volt urce of p peration ase reet serie	for heat ower on bati s, large	teryI  LA  or small   Straigl mp. of la	ratus . Night ci 24-hour neoming MP DATA I base ht? Ar mps for a	reuit circuit. line V. line voltFilm Adj. np. ratin	Phase.	.Cycle .	If so, give firm names below:  AUTO SUPPLY DEALERS  (1) Firm Name
ouse volt nurce of p peration ase reet serie lixed with or film so	for heat ower on batt s, large arcs? ckets. a	teryI  LA  or small    . Straighmp. of la	ratus . Night ci 24-hour ncoming MP DATA I base Ar mps for a	reuit circuit. line V. line volt Film Adj. np. ratin dj. socke	Phase.  socket socket g series a	.Cycle	If so, give firm names below:  Auto Supply Dealers  (1) Firm Name Man to see.  (2) Firm Name Man to see.
peration  ase  reet series  iixed with  or film so  o house we  or transfor	for heat ower on batt s, large a arcs? ckets. a	teryI  LA  or small    . Straig mp. of la  No house service.	ratus Picht ei 24-hour ncoming MP DATA I base ht? Ar mps for a leneral e meters.	reuit circuit line V. line volt Film Adj. np. ratin dj. socke No po How tes Total K.	Phase.  Socket.  Socket.  g series a  wer.  tt meters va.	Cycle	If so, give firm names below:  AUTO SUPPLY DEALERS  (1) Firm Name Man to see.  (2) Firm Name Man to see.
peration  ase  reet seriet  iixed with  or thouse we to they re  o transfor  o motors  o motors	for heat ower on batt s, large a arcs? ckets. a ires pair own mers in in servi	tery I  La  or small    Straigl mp. of la  No house n meters! see	ratus Fight ci 24-hour neoming MP DATA I base ht? Ar mps for a	reuit circuit line V. line volt lin	Phase.  Socket. Socket. g series a  ower. t meters va. al H.P.	.Cycle	If so, give firm names below:  AUTO SUPPLY DEALERS  (1) Firm Name. Man to see.  (2) Firm Name. Man to see.

Fig. 1—Salesmen collect central station data on this form. Fig. 2—This blank is filled in and filed to help give service to dealers and telephone companies

the central station files and the motor shipped without delay incident to an exchange of letters. In many other ways these files of information are useful.

# The Qualities of a Successful Jobber's Salesman

BY G. A. BORING

Manager Portland (Ore.) Branch, Pacific States Electric Company

Personality. The first factor is the salesman himself. The development of the right relationship of the salesman to himself-means simply the development of the proper personality by the successful salesman.

Inclination to Work. Inclination to work means love of the salesman's work. Inclination makes a salesman wide awake and forever seeking new ideas and new openings.

Mental Ability. There always has been and there always will be an aristocracy of brains, and the successful salesman certainly belongs in that classification. Mental ability can be developed.

General Education. The word general is important. A saleman's interests are broad and he should be able to talk intelligently to many men on many subjects. It gives him power to approach from any angle and to become a man of interest and help to all.

Health. Health is one of the foundation stones of success in anything. Health is largely a matter of habit. Any man who uses up his energy in dissipation must pay the price in failure.

Importance of Appearance. Salesmen should be well dressed, neat and clean-because their business demands it. Customers like to deal with prosperous houses. The salesman represents the house. The outward symbol of prosperity in a house is shown by the appearance of its salesmen.

Honesty. Honesty to his customer begets confidence. Honesty to his house in the matters of time that belong to his employers, expense accounts and all such things, brings to him the faith and support of his house which he must have for success.

Sincerity. Sincerity as to belief in his work. Sincerity as to the qualities of his goods. Sincerity in everything. Insincerity breeds dis- and then there is no certainty that such cases was quite satisfying.



# Repairing Irons in the Window

By FRANK H. PIERCE

THE CORDS of electric flatirons have a way of wearing out, and replacing them is one of the electrical contractor's jobs. Recently we decided to get publicity benefit from the batch we were fixing up, so we put our repairman at work in the front window. A sign reading, "We Sell and Repair Electric Irons" served to educate the crowd that gathered, and quite a few wandered inside to talk business.

trust, and distrust once aroused is exceedingly difficult to displace.

Courtesy. The outward sign of courtesy is good manners. Good manners can be acquired without price and yet nothing in a salesman's equipment pays larger dividends. Good manners enable a salesman to appear at his ease, even in the most trying situations.

Industry. A successful salesman works all the time-he doesn't know what "working hours" mean. No salesman can work intermittently in this age of competition, and be a success.

Open-Mindedness. Open-mindedness means the non-resentment of suggestions from others—new ideas -new plans and advice that keep him from the rut. "The only difference between the rut and the grave is in the width and depth." Open-mindedness places him on the team for team work.

Persistence. Persistence is the quality that prevents a salesman from becoming discouraged. It is based on courage and patience. There is no quick and easy road in selling. "Rome was not built in a day." The difficult long-pending order is usually more valuable than the immediate easily-received one.

Tact. Tact is the attribute that enables a man to deal with others without friction. It enables him to adapt himself to circumstances and to do the right thing in the right

Initiative. There are three classes of employees: The first need to be told a thing but once. The second have to be told three or four times

they will carry out instructions. The third do the things that need to be done without being told. These latter possess initiative. The typical high-grade salesman is self-reliant and confident of his ability to handle any situation that may arise.

Knowledge of His Business. (1) Knowledge of the goods he handles. (2) Knowledge of the policies, methods and personnel of the house that employs him. (3) Knowledge of the business methods and of the strength and weakness of competitors in the field in which he is to operate.

Confidence. A salesman without confidence in himself-in his goods and in his employers cannot be successful.

Enthusiasm. This is the final word in salesmanship. A man might have honesty-have the abilityinitiative-knowledge of the business-tact-sincerity-industry and other qualities-but without "Enthusiam" he would be but a statue. Enthusiasm is the white heat that fuses all these qualities into one effective mass. It is the quality that makes him dream and talk of the excellence of his line-keeps before him and with him the banner of his house and the things that go with it.

# The "Relative" Stunt

There was a salesman who opened up the acquaintance of his territory in record time by keeping an indexed memorandum in his vest pocket, and in this memorandum the names of men of the same names as his prospective customers all along the route.

When he called on Henry Stimson of Oakesville he said, "Good morning, Mr. Stimson. I wonder if you are related to George Stimson of Portland. He is a leading business man there." In this little memorandum book he had the names of men to match each man on the list of prospects he had been given. To be sure, many of these names were secured from a telephone or a city directory, and he knew nothing about the men save their names and occupations, but the little scheme worked to the extent that it afforded a means of breaking the ice with the stranger on whom he called. Sometimes he discovered close relationships to men he actually knew and the result in

# HINTS FOR THE CONTRACTOR



Ideas on Estimating, Stock Keeping, Shop and Construction Methods, and Collections

# ances Release Labor

The American housewife is patriotic. She is buying Liberty Bonds and Thrift Stamps and she is supporting the Red Cross as no other woman on earth. Perhaps she has given a boy or a husband to the service. She is intensely interested in having this war won and the terrible carnage stopped.

And she is also the livest kind of a prospect for the electrical dealer.

Let him address a letter to her explaining the labor-saving advantages of his electrical appliances: let him show her that by the use of these appliances she can do her own work, or a portion of it, at slight effort, and release one, two or more of her servants to work in munition factories or to enter active service: let her know the tremendous saving of labor that would be made for the nation if every housewife adopted the plan, and you will have interested her to the point of a sale and will have rendered your nation a very substantial service.

Suppose that your prospect does not employ servants of any kind. How will you make an appeal to her along these lines? I would send out a letter along the following lines:

### DEAR MADAM:

Are you one of those patriotic women who wish they had more time to devote to the Red Cross, the Thrift Campaign or War Relief Work? Do your household duties take up so much of your time that you have only an hour or two each day to devote to your War Work?

Then I would go ahead and show her just how my appliances would eliminate a great deal of the drudgery and conserve most of the time ordinarily expended in doing housework.

The same idea will prove a strong puller, whether used in general publicity advertising in the local newspapers, or in direct advertising sent to your mailing list or to the housewives in your territory.

Let the dealer keep alert to the

Show Housewives How Appli- public thought, whether in war or peace time, and if he applies that trend to his business, there will be a way to stimulate the sales. The electrical dealer has in this a rare opportunity, for his appliances are better suited to this sort of campaign than any other single kind of merchandise.

# Convenient Job Blank

The job blank reproduced herewith is used by the William Rowley Electric Company of Galveston, Tex. The workman carries a supply of

WM. ROWLEY ELECTRIC CO.
Date 720v. 15, 1917
Name Julgerman
JOB
Were for light
MATERIAL
Attachment Plugs
Batteries and Material
Brackets and Insulators
Clests
Conduit and Material
Cord, New Code
Cord, Show Window
Fixtures
Fuses
Fuse Blocks
Knobs
Knobs Lamps 1-200 M- Magain 12. Loom
Push Button Receptacles   Class procedures
Receptacles
Shades
Sockets
Switches, Flush
Switches, Knife
Tape
Tubes, 3-inch
Wire, No. 14, rubber covered 25.
Wire, No. 19, rubber covered
Wire No. 12, W P
Wire, other sizes
Cher Material  LADDER 1964
***************************************
***********************
***************************************
Chas Suder
LABOR 3 hr.

On this blank the workman records the materials used and enters his time. Checking up the job thus becomes easy.

these blanks with him to each job, and when he has completed the job he checks off the supplies used. This gives a complete record of the materials used on the job and the workman sets down the amount of labor at the bottom of the blank. This takes very little of the workman's time and provides a convenient form of bringing the information

into the office. A check opposite the item "Ladder" at the bottom of the list means that a ladder was taken to the job. The wagon driver is held responsible for bringing it back.

# A Collection Plan That Worked

BY CHESLA C. SHERLOCK

A Southern electrical dealer found himself in a desperate situation. It was necessary for him to make a considerable collection in order to meet a number of obligations. But it was in the dull season and collections were slow and extremely difficult. It seemed that he faced ruin.

One night, after he had given up hope, he decided to send out one more statement to his customers. Quite accidently he ran onto a box of electric cigar lighters which he had been unable to sell. Instantly an idea flashed into his mind and he went to work on the statements with a new zeal.

On the bottom of each statement he wrote a brief note stating that he had a patent cigar lighter for every customer who remitted in full in five days. He also gave the regular selling price of the lighter, and offered to give those who did not smoke an electric pocket flashlight.

Results were almost instantaneous, and this dealer saved his business by a simple resort to the quality premium appeal.

# Selling Bell-Ringing Transformers for Gas-Engine Ignition

S. J. Folkman, Westinghouse salesman at Cleveland, noticed that a customer at Findlay, Ohio, was purchasing an unusual number of bell-ringing transformers-in fact, more than any other customer, says The Contact. He inquired into the cause for this demand. The customer replied that he used the transformer to replace batteries on stationary gasoline engines, connecting the primary to the line, and the secondary to the make-and-break terminals or to the terminals of the coil if jump-spark ignition is used.

This new use of the bell-ringer opens up the way to a considerably increased sale of the devices in localities where gas engines are in use.

# Repair Checks for Identifying Appliances

The Harrisburg (Pa.) Light & Power Company has a repair-check system to insure the customer's own appliance being returned to him when left for repairs, which could be used to advantage by many contractors and dealers.

The checks are numbered in duplicate, as shown. The tag which is at-

	Harrisburg Light & Power Co. REPAIR TAG	H. L. & P. CO. 369
	No 369	CUSTOMER'S RECEIPT
0	Name	ARTICLE:
	Address	
	Article Remarks	
	Experience of the control of the con	THIS RECEIPT MUST BE PRESENTED WHEN GOODS
1	Charges	ARE CALLED FOR-

This repair check insures the return of the customer's own appliance. The tag is at once tied to the appliance while the customer holds the coupon. Later, on returning for the appliance, the customer is required to sign a receipt for the appliance he receives.

tached to the appliance bears full information as to the number of the appliance, kind of repair needed, promise of delivery, name of the owner, and the charge agreed upon for the work. The stub is given to the owner and must be surrendered and signed in order to secure the appliance. This protects both the customer and the company, and insures that the customer's own appliance will be returned to him.

# Are You Pushing the Use of Baseboard Outlets in the Home?

So many of the possibilities in lighting depend upon a generous supply of floor, baseboard, and other outlets, that the general scarcity of these in the average homes is deplorable. How many living rooms in apartments and even in houses, possess more than one or two baseboard outlets? Not only are such plugs necessary for library lamps but also for other equipment such as motor-driven and electrically-lighted musical instruments, vacuum cleaners, etc.

There is a growing tendency toward a more extensive use of portable lamps—both utilitarian and decorative—in the home, and five or six are not too many in a living room of

fair size. This movement, which is in the proper direction, should not be hampered by a scarcity of outlets.

Besides being very useful, outlets possess the virtue of being inexpensive. There should be a general movement toward increasing the number of such outlets in the home, for not only would the householder profit but also the electrical contractor, the lamp dealer, the fixture dealer, the central station, and many others. Of course this thought is not new to the electrical industry but the argument that a generous supply of floor and oase plugs goes hand in hand with the best there is in lighting, has never been too forcefully presented or overdone. The present tendency toward a more extensive use of portables should be encouraged by supplying the outlets.

# Back of Business Card Gives Complete Information

The Mutual Gas & Electric Appliance Company of Oak Park, Ill., thinks that there should be no doubt in the mind of the customers as to what the company does. The back of its business card, shown herewith,

Gas Ranges
Combination Coal
and Gas Ranges
Automatic Water
Heaters
Fortable Heaters
Gas Fixtures
Gas Fixtures
Gas Fixtures
Gas Fixtures
Machines
We also do Gas
Repairing and Repairing, Refinishing
Fixtures Gas Intercomment
Competition
Reference
We Selle Ctric Irons
Electric Toasters
Electric Percolators
Electric Portables
Electric Lamps
Electric Lamps
Electric Lamps
Combination Fixtures
Batteries
Automobile Lamps
Fittings, Gas Stove
Repairing and Repairing, Refinishing
Fixtures and Plating.

The back of the business card lists appliances and work and guarantees satisfactory service.

gives a list of some of the appliances it sells and enumerates the class of work done by the company. A guarantee of satisfactory work also is in prominent view; in fact, everything that the customer should know is listed on the card. Besides being good for the customer this stunt is doubly good for the company as it prevents representatives from using cards as note paper and thus wasting money.

# Gummed "Stripping" as an Advertising Medium for the Contractor-Dealer

Appliances and material purchased in the electric shop of the Frank Adam Electric Company, St. Louis, after being wrapped in paper are "tied" with gummed stripping, 1\frac{3}{3} in. wide, on which is printed the advertising matter shown in the picture. This advertising is printed on the



Besides holding a parcel or package securely closed, these gummed strips also tell the customer about other articles the dealer carries.

entire roll of stripping with a space of a few inches between the advertisements.

This stripping, automatically moistened with a wet sponge as it is unrolled, makes possible a neat, rapid sealing of a package that is to be carried. For parcels that require a stout manila string, there could be individual stickers of this same or other seasonal advertising.

# A Discount the More the Customer Buys

This is a plan for giving a rebate on certain goods after so many have been sold. It may be operated by giving a coupon with each sale, the coupons to be redeemed at a certain cash figure when a certain number of them have been issued, thus indicating so many purchases. plan has the effect of sending every customer out anxious to send someone else back to buy so the rebate will the sooner become effective. The coupons may be numbered serially and a statement made as to the number that must be put out before the rebate plan goes into operation. In this way people can keep informed on the development of sales. Of course, you will post a notice in the window and otherwise announce it when you are ready to refund. One advantage of this plan is that it brings purchasers back to the store a second time to get the money, thereby creating an additional opportunity to buy something more at that time.

# Record of Lighting Fixture Patents

Issued from Feb. 15 to March 27, Inclusive

Compiled by NORMAN MACBETH Consulting Illuminating Engineer, New York City

# **Mechanical Patents**

1,255,887. Electric Switch. Charles J. Klein, Milwaukee, Wis., assignor to the Cutler Hammer Manufacturing Company. Milwaukee. Wis. Filed June 3, 1911. Issued Feb. 12, 1918.

1,255,910. Electric Fixture. .Harry J. Morey, Syracuse, N. Y. Filed Feb. 14, 1916. Issued Feb. 12, 1918.

1,256,232. Illuminating Device. Charles Lowell Howard, Chicago, Ill. Filed June 4, 1917. Issued Feb. 12, 1918.

1,256,411. Shade Holder. Arthur E. Wiedenhoeft, Chicago, Ill., assignor of one-half to Harry A. Best, Chicago, Ill. Filed Nov. 22, 1915. Issued Feb. 12, 1918.

1,256,606. Spotlight. Jason C. Stearns, Worcester, Mass. Filed Jan. 18, 1917. Issued Feb. 19, 1918.

1,256,749. Incandescent Lamp Fixture. William C. H. Wefel, Denver, Col. Filed Dec. 14, 1916. Issued Feb. 19, 1918.

1,257,032. Combined Lamp and Shade Holder. Thomas Shepherd, Oldham, England. Filed Dec. 4, 1916. Issued Feb. 19, 1918.

1,257,128, 1,257,129. Adjustable Lamp Carriage. Oscar M. Sheck, Cleveland, Ohio, assignor to the Argus Lamp & Appliance Company, Cleveland, Ohio. Filed April 16, 1917. Issued Feb. 19, 1918.

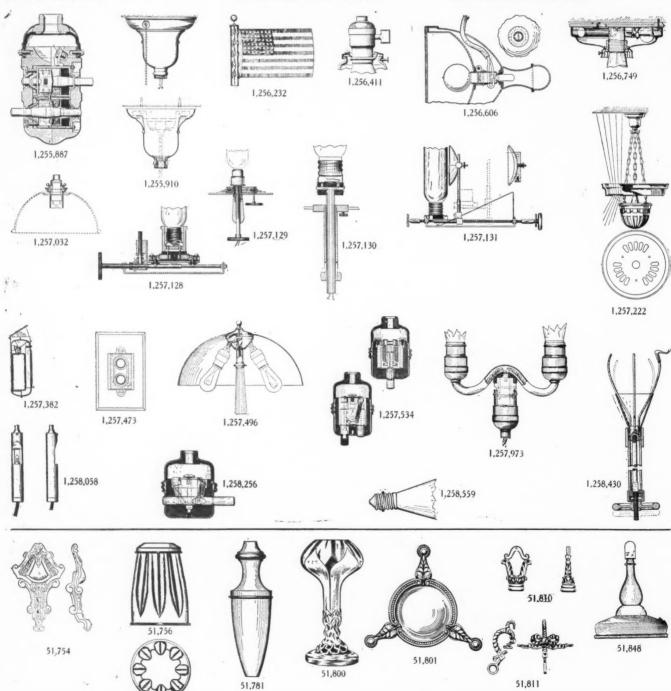
1,257,130. Adjustable Lamp Bracket. Oscar M. Scheck, Cleveland, Ohio, assignor to the Argus Lamp & Appliance Company, Cleveland, Ohio, Filed July 7, 1917. Issued Feb. 19, 1918.

1,257,131. Adjustable Lamp Carriage Device. Oscar M. Sheck, Cleveland, Ohio, assignor to the Argus Lamp & Appliance Company, Cleveland, Ohio. Filed July 7, 1917. Issued Feb. 19, 1918.

1,257,222. Reflector for Lighting Units. Edwin F. Guth. St. Louis, Mo., assignor to Luminous Unit Company, St. Louis, Mo. Filed May 18, 1916. Issued Feb. 19, 1918.

1,257,382. Indirect Illumination. Henry G. O'Neill and Ward E. Pearson, New York, N. Y. Filed Oct. 20, 1916. Issued Feb. 26, 1918.

1,257,473. Attachment for Electric Switches. Maxwell C. Frank, Piedmont, Cal. Filed Jan. 31, 1917. Issued Feb. 26, 1918.



Copies of illustrations and specifications of any of these patents may be obtained from the Commissioner of Patents, Washington, D. C., for 5 cents each

1,257,496. Lamp Cluster. George L. Lamb. Nappanee, Ind., assignor to Lamb Brothers & Greene, Nappanee, Ind. Filed April 16, 1917. Issued Feb. 26, 1918.

1,257,534. Switch. Joseph Sachs, Hartford onn. Filed April 17, 1915. Issued Feb. 26.

1918.

1,257,973. Lighting Fixture. August Bouchery, Brooklyn, N. Y. Filed May 24, 1915. Issued March 5, 1918.

1,258,058. Illuminating Device for Shaving Purposes. Otto F. Stuefer, Cleveland, Ohio, assignor to the General Electric Company. Filed Sept. 16, 1914. Issued March 5, 1918.

1,258,256. Electric Switch. Joseph Sachs. Hartford, Conn. Filed March 31, 1915. Issued March 5, 1918.

March 5, 1918.

1,258,430. Electric Lamp Replacer. Charles O. Morris, Indianapolis, Ind. Filed May 14, 1917. Issued March 5, 1918.

1,258,559. Lamp Socket Member. Monroe Guett, Hartford, Conn., assignor to the Hart & Hegeman Manufacturing Company, Hartford, Conn. Filed Sept. 26, 1916. Issued March 5, 1918.

# Design Patents

The following are ALL the design patents pertaining to lighting materials, issued by the U. S. Patent Office between February 27, 1918, and March 27, 1918, inclusive:

51,754. Arm for Lighting Fixtures. Arthur Meng, Cleveland, Ohio, assignor to Cleveland (Ohio) Chandelier Company. Filed Oct. 24. 1917. Issued Feb. 12, 1918. Term, three and one-half years.

51,756. Lamp Socket Hood, Henry D'Olier, Jr., Bridgeport, Conn. Filed Nov. 16, 1917. Issued Feb. 12, 1918. Term, fourteen years.

51,781. Lighting Fixture. Bernard Gothberg, Westfield, N. J. Filed Dec. 3, 1917. Issued Feb. 19, 1918. Term, three and one-half years.

51,800. Lamp. Louis Comfort Tiffany, New York, N. Y. Filed Dec. 26, 1917. Issued Feb. 19, 1918. Term three and one-half years.

51,801. Plate for Lighting Fixtures, Lester R. Wellman, Chicago, Ill. Filed Jan. 2, 1918. Issued Feb. 19, 1918. Term, seven years.

51,810. Chandelier Chain Terminal, Charles Ernest Jones, Chicago, Ill. Filed Jan. 17, 1918. Issued Feb. 26, 1918. Term, three and one half years.

51,811. Clamp for Light Reflecting Bowls. Charles Ernest Jones, Chicago, Ill. Filed Jan. 17, 1918. Issued Feb. 26, 1918. Term, three and one-half years.

one-half years.

51,848. Portable Electric Lamp Base. Arthur W. Wellington, Waterbury, Conn., assignor to Waterbury (Conn.) Manufacturing Company, Filed Dec. 29, 1917. Issued March 5, 1918. Term, fourteen years.

# An "Employees' Sale"

Advertise that the employees of your store will receive a certain per cent dividend on all the goods they sell during the sale. This will be successful in getting the employees all vitally interested in selling the goods and in booming the sale among their acquaintances, and it will develop in friends of employees an interest in coming to your store for their needs in your line while the sale is going on. This is sure to result in interesting at least a few new families who will become regular customers. In order to get the interest in the sale of the employees you may have who do not sell, employees who deliver goods or do other work not connected with the selling end, some plan should be effected by which such employees will profit. An award might be made to such people of a certain percentage of the extra business done during the sale.

# SALES HELPS FOR THE DEALER



What the Manufacturer Offers to Help You Get More Trade



# Sweeper Purchaser

Interest in the satisfactory working of the customer's vacuum cleaner after it is sold, coupled with a definite follow-up service to the customer, has helped the P. A. Geier Company, Cleveland, Ohio, manufacturer of Royal vacuum cleaners, to build up a clientele of boosters for its product.

Attached to every cleaner sold is a postcard which the purchaser is asked to send to the manufacturer. asking for a certificate of guarantee.

On receipt of this card the Geier company writes a friendly letter to the customer, incloses the guarantee and with it a booklet which tells in

Keeping in Touch with the to the places on the cleaner that need to be oiled and how often to oil it.

The customer is also asked for an expression of opinion as to how the user likes the machine. For this purpose a card is inclosed. Space



Replying to questions as to how the sweeper works customers fill out this card, incidentally giving the Geier Company a valuable list of new prospects.

THE P.A.GEIER COMPANY SELECTRIC PIN RATOR HAMPORYERS
SECTION CLEANING AND AND SANDERS IT'S TIME TO OIL YOUR ROYAL CLEANER. take a great deal of care and pride in Royal Cleaners and always like to hear for they have had an opportunity to test all kinds of work and find out how much ally naves. An expression on the enclose very much appreciated. Quite frequently Royal users show their cleaner to their Friends who become very much interested, but committees make the unfortunate sistake of buying inferior cleaner. To help us reach your friends should own Royal Cleaners, won't you do us both a favor by giving us names and addresses of any of interested friends on the enclosed card? Yours for service THE P. A. GETER COMPANY

With this letter the company sends to the purchaser of a vacuum sweeper an oil can and a book of instructions telling how and when the sweeper should be oiled.

an understandable manner all about the cleaner and its care. Pictures of the various uses of the cleaners and of its parts add value to the

Ninety days after the above is mailed the customer gets a letter which starts "It's time to oil your cleaner." An oil can is sent with this and also brief instructions as

is left at the bottom of the card for the names of friends who might be interested in the cleaner. These names are sent to the nearest dealer, and the manufacturer reports very good results in sales to these names.

# **Investigate These Washing** Machine Figures

The Federal Sign System (Electric), Chicago, has put out an attractive leaflet that should prove intertesting for the housewife. It sets forth the advantages of the Federal electric washing and wringing machine and compares costs.

Here are figures which should prove valuable to any washing machine salesman or dealer in his local campaigns to "Lighten the Labor of the Home."

### THE OLD WAY

Carfare Two mea	s at \$2 per week\$208.00 at 10 cents per week10.40 ls at 30 cents each62.40 worn out by washboard or e type machine75.00	)
Total	\$355.80	)
	THE FEDERAL WAY	

	* * *	Acres			-		~ ~	_						-							
Cost of	ma	achi	ne									0	0				1	1	5.	0	(
Interest	on	inv	est	tm	lei	ıt.					0		0		0	٠		1	3.	8	Ą
Housewif	0,8	tin	10	2	+	- 2	5		CE	ne	12	3		TO	e	r					
hour.									0 0		-		0	۰	0	0		21	0.	U	ę
Clothes	desi	roy	ed												*						
Total																					
Saving	to	you	ı i	n	tv	VO	3	76	a	r,	S	1	i	n	16	,	99	2	03	L.	

# The Visualized Campaign Chart— A Novel Dealer-Help

By J. A. CORCORAN

DEALERS do not always have the time or training to so plan local advertising campaigns that full advantage is taken of the wealth of "dealer-helps" offered by different electrical manufacturers.

To overcome this obstacle the General Electric Company has just is-

EALERS do not always have sued a unique chart for the use of the time or training to so electrical dealers who sell its fans.

The chart measures 38 in. by 50 in., and visualizes the different local advertising mediums that the dealer can employ; shows the advertising material that is available for each medium; enables the dealer to plan his entire fan advertising in advance,

and provides a means for following the progress of the campaign.

The local advertising mediums are shown in the form of paths starting from the dealer's desk at the top of the chart and terminating in arrows which point to the dealer's store.

On each path is illustrated the advertising material that the company furnishes for the medium represented.

In the campaign book which is made up for each medium, complete instructions are also given for using the advertising material to the best advantage.

The magazines carrying the company's national fan advertising are shown as indicative of the employment of popular mediums to back up the dealer in his efforts locally.

At the bottom of the chart are illustrated four sales ideas for electric fans.

Forms are provided on the chart so that the dealer can schedule his complete campaign.

The chart can then be hung in his office and the campaign that he planned be easily followed out by one of his employees. As each item on the schedule is completed it can be checked off, enabling the dealer to keep in touch with the progress of the campaign throughout the fan season.

# **Brand New Money**

You can give your store an individuality and create a pleasing impression on the part of your customers by giving only new money in change. This is not so difficult to manage. You can get the new money, silver as well as paper, at the bank, and if your bank does not always have it, arrange with them to get it for you. The small express charge you might have to pay would be money well spent because of the advertising value of the reputation for being the store where new money always is given in change. A day or a week of this plan would be merely a pleasing innovation, but to keep it up indefinitely would mean that everyone would know about it and talk about it and you would profit by the publicity thus gained.



This "Visualized Chart" of fan-selling methods shows the dealer, at a glance, all of the local advertising mediums at his command. It visualizes the "dealer-helps" that the manufacturer has available; it shows the distribution of dealer-helps through each medium; outlines the ways the mediums reach the public; makes possible the co-ordination of all the advertising mediums so that the campaign can be planned in advance; and it can be used to record the progress of the dealer's own campaign.

# Price Differentials on a Bases of Quality and Service

(Concluded from page 203)

whether it is a bad habit in the past or fair dealing on the part of the manufacturer.

# THE PROBLEM OF THE EXPANDING SMALL BUSINESS

Now the point right here is that the manufacturer beginning in a small way with a retail and trade business has made a price probably justifying the cost of wholesaling and retailing. When he makes his territory arrangements he must further consider that he has to have his representatives go out in to the country and there is an added expense. Then again the jobbing house in St. Louis has not been able to control the entire Western situation and the manufacturer decides on opening up his own District office in Chicago, which again increases his expense account. Naturally he has kept up with his expenses but always wishing to take care of his old time customers he is still selling at retail in his home town and making a price for retail and the trade conditions in his home town. He still has, however, all the other phases of the manufacturer in the way of selling to contractors direct in other cities, to jobbers, and also keeping up his own district office. He has therefore every phase in his control and should, in making the price to the ultimate consumer take in consideration the overhead for manufacturing, for wholesaling, and for retailing, in other words make his price to own customer, the consumer.

Now I am satisfied that under fair conditions of an efficient business, that the wholesaler can take the cost of wholesaling with a profit off of his hands, and the retailer take his part of the work off his hands, and serve the manufacturer's customers to far better advantage than he can, because he is busy with his manufacturing business and is really out of touch with his retail customers. He can work to best advantage if he would only act as a manufacturer and make sales direct to as few big distributers as possible.

Now enters the next phase in the situation which entirely disorganizes the old condition and is liable to disrupt even the best condition of any business, that is, we will say for example that in St. Louis a maufacturer decides to make exactly the same lines as the New York manufacturer. We will say that he has had nothing to do with the previous sale of this article, but decides that the article is a good proposition to manufacture in St. Louis. Now to begin with he has no business and for obvious reasons he will look around St. Louis for a natural outlet. He will practically duplicate the starting of the original manufacturer and will sell to anybody and everybody, that is, he will be glad to sell retail and he will be glad to sell wholesale to the trade.

He has absolutely no use for the local jobber but finally decides to take on a local jobber because of his value in distributing to the small towns around St. Louis.

In fact, the entire procedure goes on just as lined up in the previous example but naturally the original manufacturer is losing his ground in this territory and his distributers are crying for assistance and heretofore the natural consequence was the cutting and slashing of prices, and a barbarous state of competition held forth for a number of years with the final result that either the two manufacturers came to the conclusion that they could do a legitimate business on fair prices without cutting one another's throats or one of them went to the wall and got out of the business. These days the chances are that they would see the light and decide on fair methods of doing business and "live and let live," and the chances are that they would both be in a position to sell in their local towns to the retail trade as well as the wholesale trade, and are absolutely dependent on the jobbers and distributers in the other sections of trade beyond their home town.

Now I have made this example to show how it is absolutely necessary from my viewpoint, and from my experience, that we must have middlemen, and just why we occasionally hear, or read in the newspapers, that the middlemen "must go" I do not know. The middlemen may "go," truly, in places where a local manufacturer can control the situation and put all middlemen in the same line out of business, but if he wishes to expand and get into a territory outside of his home town he himself is absolutely dependent on the middleman and there is no way of getting out of it. By the way, from the days of the beginning of commerce the middleman was the big factor in such commerce. The wealth of the ancients that we read about in history was not made so much by the producer as it was by the middleman who gathered up the products of the world he could purchase the cheapest and brought it in his ships to that part of the world in which he could get the most money for it, and regardless of every day com-ments on the middleman he has been with us since the beginning of history and he will stay with us till the end of the world. In some cases the middlemen will be the retailers only and in others he will be both the wholesaler and the retailer, and from my experience and in my opinion he is not a necessary evil, but a necessity for the distribution from the manufacturer and producer to the ultimate consumer.

I believe this to be a fundamental fact and therefore (on account of our present day of civilization making it possible for close correspondence be-

tween the manufacturer and producer and ultimate consumer wherever he may be) that the manufacturer should set the price to the ultimate consumer and this price should be recognized in the sale to the ultimate consumer by whatsoever classification of the business that makes such ultimate sale, whether it be manufacturer, central station, jobber, or retailer. This is positively fair to the ultimate consumer and makes for a stable condition in the industry. I am a firm believer that conditions will change so that we shall have a price-maintenance law which will make it a crime to cut under a manufacturer's advertised price to the ultimate

### SHOULD HAVE A USER'S PRICE

Now summing up my opinion of the whole situation, I am inclined to believe a fair policy to be: (1) That we have an ultimate user's price, this to be given to everybody who walks in to the store most convenient to him and makes his purchases in the quantities usually of the smallest possible made of the article in question. (2) That there be a differential to compensate the retailer for making such sale, if he himself would only have the demand to buy in the equal quantity. (3) That the manufacturers and wholesalers, and retailers, get together on standard-package quantities that are reasonable and will be used in making a great majority of the sales between the manufacturer and jobber and between the jobber and the retailer. Here there should be a still larger differential because there is no doubt that standard package quantities can be handled by the manufacturer and jobber to better advantage than small pick-up orders.

There should be a classification of larger buyers who, on the broken-package quantities, should get the same price as the retailer but he should not get more than one half of the differential on the full package quantities. This buyer would probably buy as much, if not more, than half of the retailers in that particular locality and would have his own particular working force to make the installation. This is where I am probably going counter to my friends, the contractors, but I am satisfied that unless this arrangement is made to begin with at least, that we will never be in a position to make good our co-operation with the jobber.

I have had this idea particularly reinforced after my talk with a hardware friend, for I find that in that field they have similar conditions—that is, machine shop and manufacturing plants are in a position to buy the small tools and other hardware at exactly the same price as the retailer. I think at this particular point that it is absolutely necessary for the contractor-dealer to make haste slowly and to show the manufacturer that he can take care of the actual retail business before asking for what he thinks are his rights with the large purchaser's business.

# NEW MERCHANDISE TO SELL AND WHERE TO BUY IT

Appliances, Socket Devices and Wiring Supplies Which Manufacturers and Jobbers Are Putting on the Market

Including Many New Appliances to LIGHTEN THE LABOR OF THE HOME

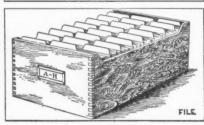
# How to Use These Pages to Make Your Own Buying Index

Do you want an up-to-date buying index of "New Merchandise to Sell"—an index that you can make up as you go, to fit your own needs and those of your customers? Then file these items in a "Buying Index" of your own, in your own way—either on filing cards, on loose-leaf sheets, or in a scrap book—just as you prefer.

Beginning with the September, 1918, number Electrical Merchandising has been furnishing its readers with the selective new-merchandise catalog service con-







tinued on these pages. By tearing out those items which affect your business and pasting them on filing cards, you can make a buying index that will put information on what is made and who makes it, right under your finger's end.

Every item, with its illustration, will fit a standard 3-in. by 5-in. filing card. Or, if preferred, these items can be pasted on sheets of paper for binding in a loose-leaf catalog or folder.

That there may be no interference between any two clipped items, these "New Merchandise to Sell" articles are printed on one side of the page only. Many of our readers have been in the habit of clipping from this section since it was first established. With the new standardized arrangement Electrical Merchandised arrangemen



# Electric Phonograph Lamp

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

The Electric Phonograph Corporation, 29 West Thirty-fourth Street, New York City, is putting on the market an electric phonograph lamp called the "Phonolamp." It is a combination of a high-grade phonograph with an electric motor and an artistic electric table lamp. It has circular construction from the creation of the sound vibrations in the sound box to the end of the conductors of the vibrations at the opening of the top. It conveys the sound vibrations upward instead of forcing them downward.

The phonograph and light features of the "Phonolamp" are independent of each other.

The phonograph and light features of the "Phonolamp" are independent of each other.

A Thorpe Universal electric motor is used. It is made especially for phonographs, which requires a steady, low speed. It works on either direct or alternating currents. It is simple in construction, having only two moving parts.

The phonograph equipment consists of one arm, soundbox, permitting playing of all makes of records by the use of steel needles and diamond, sapphire or jewell points.

points.

The lighting feature consists of two electric lamps.

# Drying Machine for Hands and Face

From Electrical Merchandising, April, 1918

The Groton New York Electrical Devices Company, Inc., is manufacturing a machine called "Airdry" for drying hands and face. The machine consists of a white-enameled iron standard containing a motor, fan, heating element and an adjustable nozzle for directing the flow of air.

Connected to an ordinary lighting circuit the machine is set in operation by means of a foot lever in the base of the standard. Pressing the lever downward causes warm air to be discharged through the nozzle, Releasing the lever stops the motor and the flow of air.

This machine is adjustable to any position. It is said to dry thoroughly. It is safe and sanitary and eliminates towels.

It is particularly adaptable for public washrooms, factorles, etc.

The motor is of fractional horsepower and very economical to operate.



### **Auto Transformer**

From Electrical Merchandising, April, 1918

A new line of auto transformers is being marketed by the Bay Point Electrical Supply Company of Berkeley, Cal. These transformers are intended for use in in-

dustrial plants where there is need of changing the voltage from 440 to 220 or 110. They are made in both single and three-phase units, and when the capacity is 7500 volts-amperes or less they are air cooled so that they may be mounted indoors. The cases are filled with coil cement.



### Calculating-Adding Machine From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
The Monroe Calculating Machine Company, Woolworth Building, New York City, is manufacturing a machine that not only adds, but subtracts, divides and multiplies. The operation is extremely simple; forward turns for addition and multiplication; backward turns for subtraction and division. This machine gives a visible check at every stage and makes possible the immediate correction of operating mistakes. It handles small figures as well as large with speed and accuracy.

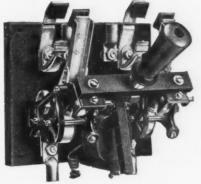
Special accounting problems can also be taken care of, it is said; such as figuring unit costs and extensions; extending invoices and taking off chain discounts without taking your numbers out of the machine; pro-rating; figuring percentages of increase or decrease; foreign exchange; computing commissions, etc.

### Circuit Breakers

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

The Roller-Smith Company of 232
Broadway, New York City, has brought out an inclosed-type plain no-voltage circuit breaker. It is pointed out that these breakers are now mounted in inclosing cases. The outfit complete comprises the circuit breaker, the inclosing case, which is provided with wiring inlets at the top and bottom, a convenient handle with which the breaker may be opened by a slight upward pressure or closed with a slight downward pressure, and a target on the left side of the case showing whether the breaker is open or closed. The equipment is offered for 45-amp. and 100-amp. loads and voltages at 110, 220, 312 and 440. Each breaker has one no-voltage coil, which is wound for the voltage specified.



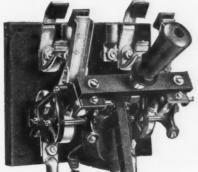
# Variable-Speed Alternating-**Current Fans**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

The Kimble Electric Company, 634
Northwestern Avenue, Chicago, has prepared for the 1918 season a line of variable-speed alternating-current fans. These variable-speed fans will be made up in sizes ranging from 18 in. to 30 in. in ciameter. These fans are reversible and variable in speed.

The entire control of speed is obtained by two chains suspended from the fan and a slight pull on either chain will either increase the fan speed or decreasit, and maintain it at whatever speed is desired. If the chain is pulled beyond the neutral position the fan will reverse and instantly be converted from an exhaust fan to an intake fan. The fan equipment is built interchangeable from 110 volts to 220 volts. These fans will be equipped with a very small transformer, enabling the use of a low-voltage motor.



# **Keyless Socket**

From Electrical Merchandising, April, 1918

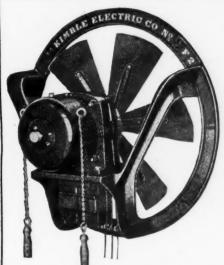
Especially in millwork, it is frequently helpful to take advantage of the opportunity to place a larger number of lamps per circuit than the code permits for general wiring. In order to provide a keyless socket for pendent drop lights wired with No. 14 portable cord, the Bryant Electric Company of Bridgeport, Conn. has added to its line of "New Wrinkle" socket caps one having a strain relief porcelain bushing with ½-in, hole. The catalog designation of this socket cap is CB. When used in connection with the Bryant Company's No. 13 "New Wrinkle" keyless socket body, it provides a device that meets the conditions contemplated by rule 23-D as to inspection departments, the contractor and the customer.

# Master Switch

From Electrical Merchandising, April, 1918



The Igranic Electric Company, Ltd., of London, England, has developed the master switch shown herewith. This switch has a countersunk push button at the side for starting and a lever at the front for stopping. This type is much ravored by those who consider that it is more safe to have starting and stopping devices of dissimilar shape than to have buttons which are distinguishable from each other only by the marking.



### Shade Holders

From Electrical Merchandising, April, 1918



Harvey Hubbell, Inc., of Bridgeport, Conn., has placed on the market a line of brass shade holders of the three-screw type for use with medium and rogul base weatherproof and porcelain scekets. The attachment to the socket is accomplished by means of a clamp and screw arrangement which guarantees a firm grip. The holders are given a bright dip and lacquered finish, making an attractive as well as useful device.

# **Outdoor Electric Signs**

From Electrical Merchandising, April, 1918

Outdoor electric signs with outside electric bulbs on art glass background are being manufactured by the Flashlight Sign Works, 210 North Clinton Street, Chicago, Ill. These signs can be regulated so that one side of the sign lights up as the lights on the opposite side go out

lated so that one side of the sign lights up as the lights on the opposite side go out.

The bulbs on the side being illuminated throw back light to produce a glow which shows the color of the glass on the side not illuminated and makes the lettering readable. The color effect changes as the flasher illuminates first one side of the sign and then lights up the other.

### **Motor-Driven Sanders**

From Electrical Merchandising, April, 1918

The Electrical Merchandising, April, 1918
The Electric Specialty Company of
Stamford, Conn., has developed the speed
ander shown here, which is driven by
an alternating-current or direct-current
notor. The motors used are said to be
dustproof, with shafts over-size, running
n ball bearings. The steel disks are
turned and ground accurately on all surfaces, insuring perfect balance. This
machine is equipped with a micrometer
adjustment which when turned one space
tips the table 0.001 in. on 1-in. thickness.
This is a great convenience in duplicating
one bevel against another, it is said. The
nicrometer also acts as a positive rightargle stop, so that the table can be kept
perfectly square with the disk.

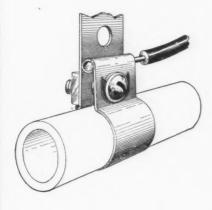


# **Ground Clamp**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
An improved ground clamp is being marketed by the H. B. Sherman Manuiacturing Company of Battle Creek, Mich. It is all copper, one piece, and can be drawn tight. The roll portion for soldering is turned in to rest against the opposite tongue of the clamp, preventing the two ends from tipping together when tightened and holding the ears parallel.

The bolt head rests in a deep countersink and it is said the greatest pressure will rot make the bolt tear through the copper. The countersink and washer also form a clever device for holding, even when solderless connection is desired,—the wire wrapped around the bolt shank lies inside the countersink under the washer and sidewise jerk cannot loosen it. This makes the ground clamp well adapted for telegraph, telephone or signal work. Material used on this clamp is flexible sheet copper, with a stout bolt heavily coppered and a brass washer. The terminal end is heavily turned ready for soldering.



Each item will fit a 3-in. x 5-in. standard filing card. Simply clip and paste on card (or loose-leaf sheet), filing under proper heading for ready reference when you want to buy. Continued on third and fourth pages following.

# GOSSIP OF THE TRADE



Glimpses of Electrical Men as Caught by Lens and Pencil

# Jobbers to Meet a Week Earlier than Planned

The tenth annual meeting of the Electrical Supply Jobbers' Association at the Homestead Hotel, Hot Springs, Va., has been advanced from May 28, 29 and 30, to May 21, 22 and 23. Franklin Overbagh, 411 South Clinton Street, Chicago, is secretary.

# National Electric Light Association War Meeting at Atlantic City, June 13-14

President J. W. Lieb of the National Electric Light Association has called the annual meeting of the association—the sessions to be devoted entirely to war matters—for June 13 and 14, at the Hotel Traymore, Atlantic City, N. J.

"While it is felt necessary under the constitution to hold our annual meeting," explains Secretary T. C. Martin, "the essential requirement is the limiting of work in the meeting to the consideration of pressing and vital war problems as related to the industry. In view of the fact, however, that practically all our member companies are short-handed and that their officers have their time taken up not only with general problems of the industry but with local problems and difficulties that come upon them as patriotic citizens, it is believed that the attendance at the meeting will inevitably be much smaller and more restricted than would occur in normal times and under usual conditions; all other subjects however important being swallowed up for the time being in the fundamentally vital and essential one of winning the war."

WALDSO TURNER announces the formation and opening of the Electrical Warehouse, Inc., at 136 Larned Street, West, Detroit, Mich., as wholesale distributer of electrical construction materials.

# Association of Edison Companies Will Hold Business Meeting Sept. 10

On March 21 the executive committee of the Association of Edison Illuminating Companies held a brief meeting at association headquarters, New York, and decided that as the general business conditions which made it desirable to dispense with the customary convention last year have not materially changed in the interim, the association will hold only a business meeting this year. This will be held in New York on Sept. 10.

NEW YORK ELECTRICAL SOCIETY.—"Experiences at the Front in France and Flanders" was the title of a talk at a joint meeting of the Engineers' Club and the New York Electrical Society by Lieut. Pierre Chevalier, Twenty-second



The gentleman who has gotten between us and this widespread panorama of the hills of Allegheny County is Harry Kirkland, vice-president of the American Conduit Manufacturing Company, and obviously one of the greatest men of the electrical industry. H. K. at the moment of exposure was trying to decide, in the interests of power conservation, whether it would be best to climb the hill or have it moved.

French-Canadian Battalion, on March 18, 1918. Dr. Charles A. Eaton, head of the National Service Section of the United States Shipping Board, Emergency Fleet Corporation, also spoke on "The United States as a Test of Democracy."

CLEVELAND ELECTRICAL LEAGUE.—A spectacular review entitled "Wake Up, America," was produced by John H. Patterson, president of the National Cash Register Company, for the Cleveland Electrical League on March 14. On March 21 A. C. Gilbert, of the Cleveland Trust Company, addressed the Electrical League on "German Influences in South America—One Bloody Battle the Kaiser Lost."

COLUMBUS ELECTRICAL
CONTRACTORS' ASSOCIATION.—At the annual meeting of
the Columbus (Ohio) Electrical Contractors' Association on March 14
Carl Entrekin was chosen president,
William McGaraity vice-president
and Chas Weisz secretary-treasurer.
The members reported business conditions good.

SAN FRANCISCO ELECTRI-CAL DEVELOPMENT LEAGUE.
—Prof. B. M. Woods, president of the Academic Board, School of Military Aeronautics, University of California, spoke at a luncheon on March 13 before the San Francisco Electrical Development League on "How Americans Are Trained to Fly."

NEW JERSEY ASSOCIATION OF ELECTRICAL CONTRACTORS AND DEALERS—The second quarterly meeting of the New Jersey Association of Electrical Contractors and Dealers will be held in Achtell-Stetter's Hall, 842 Broad Street, Newark, N. J., on Saturday afternoon, April 27, at 1.30 p. m. B. F. Sprague is secretary.

JOVIAN ELECTRIC LEAGUE, LOS ANGELES.—At the last regular meeting of the league the speaker of the day was August F. Knudsen. The subject of his talk was "Hawaii." T. C. Carr of the General Electric Company was chairman of the day.

ELECTRIC CLUB-JOVIAN LEAGUE OF CHICAGO.—"Wireless Communication with Airplanes" was the title of an interesting address given before the Electric Club-Jovian League of Chicago on March 21 by Prof. F. A. Rogers of Lewis Institute, Chicago.



After E. G. Holding had planned the installation of 800 cp. on the tower of the Salt Lake City Temple, he wanted to see for himself that all of the lamps were connected up. Mr. Holding is the oldest electrical contractor in Utah, having entered the electrical field in 1876. Besides putting in telephone central offices in some of the largest Western cities, he also put in operation the first lighting plant in Utah. Since 1887 he has been in business and his was the first electric shop to be established between Denver and San Francisco.

# Estimators' Organization Formed at Chicago

On Feb. 6, 1918, a group of electrical estimators met informally at Chicago, for the purpose of forming an organization to bring estimators together socially, and at the same time to provide a place for discussing mutual problems. The organization formed is known as the Double E Association. Meetings are held on the first and third Thursdays of each month. Any man estimating electrical work is eligible for membership. At the meetings no contracts of work not yet closed are discussed in any way. The organization has no bearing whatsoever on any organization that exists among employers. This organization proposes to include all estimators of Chicago in its number and to grant charters for similar organizations in other cities. The officers are: George Carlson of F. E. Newberry & Company. president, and C. D. Campbell of L. K. Comstock & Company, secretary.

# World's Salesmanship Congress at Detroit on April 24-27

The part of salesmanship in winning the war and in preparation for the commercial struggle between nations after the war, will be feature topics to be discussed by business leaders before the World's Salesmanship Congress, which will be held at Detroit on April 24-27. Herbert N. Casson, now of London, England, formerly one of the best known of American merchandising men, will also address the Congress, telling of the solutions which British business has found for the problems which are now facing America.

# Minnesota Electrical Contractors Association

Dean John R. Allen of the college of engineering and architecture, University of Minnesota, spoke on "Electrical Conditions in Europe Before the War" at the convention of the Electrical Contractors' Association of Minnesota, at Minneapolis, on April 5. At the business meeting of the association it was decided that the old officers would remain in office until the regular meeting in June. It was also voted that a paid secretary be employed. At present the membership is about thirty-one, but there is hope of increasing this to more than 100. W. L. Goodwin spoke on the Pacific Coast Merchandising Plan and answered questions that had been dropped into the question box.

J. H. SROUFE and S. C. JAGGAR of Portland, Ore., have organized the Jaggar-Sroufe Company and have opened offices in the Pittock Block as electrical contracting engineers. Special attention will be devoted to marine and mill work. It is stated that the new firm has already closed a considerable number of contracts for electrical work on ships being built in the Northwest.

LYMAN C. REED, 821 Union Street, New Orleans, La., has been appointed district representative for Louisiana and adjacent territory by the Hart Manufacturing Company, Hartford, Conn.

EDWARD K. PATTON, for the last eighteen years Western manager of the Bryant Electric Company, died of apoplexy at his home in Chicago on March 23. Mr. Patton, who was born in Chillicothe, Ohio, about fifty-eight years ago, first became associated with the electric supply business in 1888, when he was appointed Western manager of the Perkins Electric Switch Manufacturing Company. When, in 1900, that company passed into the control of the Bryant Electric Company, he was continued in a similar capacity.

THE W. F. IRISH COMPANY is the name of a new electrical supply house opened up at 130 West Thirty-second Street, New York City, composed of the following members: W. F. Irish, F. S. Gardner, F. V. Hann and N. Sanders. All of the above-mentioned parties were formerly connected with the Sibley-Pitman Electric Corporation, New York, Mr. Gardner having been sales manager for a number of years.

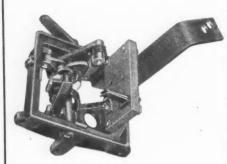
THE WESTERN ELECTRIC COMPANY'S New York City distributing house has been moved to 151 Fifth Avenue. Its previous location was at 463 West Street. The building at the latter address will hereafter be devoted to the activities of the Western Electric Company's engineering department.



Sunday-morning breakfast at the home of Earnest McCleary and "Billy" (not Goodwin, but a good one). Billy comes of a long line of plain but honest Detroit cats, and is ten months old. Incidentally his efforts to come "half-way" show that he appreciates the necessity of doing his part, if he wants to remain a member of the McCleary household.

# Inclosed Weatherproof Flood Switch

From Electrical Merchandising, April, 1918



The Cutler-Hammer Manufacturing Company of Milwaukee has developed an inclosed weatherproof float switch built strongly and with an operating mechanism that is said to positively open and close with the rise and fall of the float. The switch can only be open when the

lever is in one position and only closed when in the opposite position.

A cast-iron case provided with mounting ears carries all of the operating mechanism and terminals. A hole is tapped and bushed in the top of this case for the entrance of conduit. The arrangement permits removing the lower inclosure without disturbing the operating mechanism or connections. The new operating mechanism consists of a cam and roller. The arm carrying the roller is pinned to the main shaft which is turned by the outside cast-iron lever. The cam is made of malleable iron and is cast integral with the sleeve carrying the switch blades. This sleeve turns on the main shaft. When the main shaft is rotated the roller is driven up the side of the cam tightening an elliptical spring. When the roller passes the point of the cam the tension of the spring either opens or closes the switch.

These switches are furnished complete with a sheet copper float having conical ends, float rod, and a heavy float rod guide. The single pole switches are intended for use in connection with a sarrter for controlling a.c. or d.c. motors. The two, three and four-float switches are designed for single-phase self-starting and polyphase squirrel cage motors which may be thrown directly across the line to start. They can also be used for direct-current motors when used with a suitable self-starter.

# Flatiron

From Electrical Merchandising, April, 1918



The Savo Electric Company, 1340 Nicholas Building, Toledo, Ohio, is putting on the market an electric iron designed to give added safety and to cut down the amount of current consumed. This is brought about by a button in the handle. When the iron is in use the thumb holds the button down and the electric current is allowed to heat the iron. When the button is released the current is automatically shut off.

Warming Pad

From Electrical Merchandising, April, 1918

# **Industrial Lighting Fixtures**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

The Luminous Unit Company of St. Louis, Mo., has developed the industrial light shown herewith, which is made in sizes to accommodate lamps ranging from 100 watts to 1000 watts. It is said that this unit is scientifically correct in degign, making possible high physical efficiency and at the same time eliminating all objectionable glare. This fixture is composed of two elements, an upper element of white porcelain enameled steel and a white porcelain enameled steel and a white porcelain enameled steel reflecting come suspended below the upper reflector in such a manner that all light above the angle of 40 deg. is intercepted and reflected to the working plane. This fixture can be attached to any socket in a minute and is adaptable to present righting equipments.



# **Inclosed Switches**

From Electrical Merchandising, April, 1918' From Electrical Merchandising, April, 1918'
The Krantz Manufacturing Company of Brooklyn, N. Y., is manufacturing and marketing through the Westinghouse Electric & Manufacturing Company a line of safety auto-lock switches. These inclosed switches are intended for use as main-circuit switches and wherever the ordinary knife switch may be applied. The manufacturer claims that it is impossible to touch live parts regardless of the position of the switch or of the door. The switches are desirable for use in steel mills, factories, mines

and similar places employing men with practically no knowledge of electricity and its attendant dangers.

Brush-type contacts are used which cannot weld shut from slow closing. Parts are removable and being interchangeable are readily replaced without disturbing the connections. Brush contact is made directly with incoming-terminal block and fuse-terminal block.

The stationary contacts are of hard drawn copper and with the fuse clips and terminals are mounted on a slate base. The moving contacts are laminated spring copper brushes with auxiliary arcing contacts at each end.

# From Electrical Merchandising, April, 1915 In order to fill the demand for an electric warming pad at a smaller price than its standard 12-in. by 15-in. pad, the Westinghouse Electric & Manufacturing Company has placed upon the market one of those pads whose dimensions are 9-in. by 12-in. This pad is equipped with 15 ft. of cord, with attachment plug. No switch is provided, the current being turned on and off at the lamp socket, or by separating the attachment plug. To prevent overheating, two thermostats are inclosed in the pad. These are connected in series and should the temperature rise to a point near the maximum safe value, one or the other will open the circuit. Upon a fall in temperature, the thermostat will reclose the circuit, thus maintaining the heat at a uniform temperature. This pad is very soft and pliable, thus allowing it to conform easily to any part of the body. Some of its advantages are: Its instant availability, its continued heat at uniform temperature, the absence of any danger of overheating or scalding the patient, or of wetting its surroundings, and the low cost of operation. This pad is manufactured in one style only—for a voltage range of 95 to 125, with a consumption of 48 watts at 110 volts. **Duplex Switch for Single**

Gang Box From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

For controlling two independent lighting circuits from one point, the Bryant Electric Company of Bridgeport has designed a switch that can be used as a substitute for two separate single-pole fush switches which require a two-gang switch box. The device consists of two Perkins Type O push-button switches mounted in a porcelain cup, each switch



having its own line and circuit terminals, so that separate feeds for the two circuits can be brought into the switch. The switch fits into any shallow single switch box and takes the standard two-button plate. The device is rated at 10 amp., 125 volts—5 amp., 250 volts.



# **Bulb Tester**

From Electrical Merchandising, April, 1918

A bulb tester recently put on the market is the "Presto," manufactured by the Metal Specialties Manufacturing Comiany, 338 North Kedzie Avenue, Chicago, Ill. The bulb tester is a transformer made to be used on a 110-volt circuit, alternating current only. It is valuable for testing all sizes of automobile electric light bulbs with Edi-Swau base of any voltage from 13 to 12.

The lever switch has different contact points for different bulbs of different voltage. It is equipped with 7 ft. of cord and screw plug to fit any ordinary 110-volt lamp socket.

Clip These for Your Card or Loose-Leaf File of New Merchandise





### Disk Fans

From Electrical Merchandising, April, 1918 From Electrical Merchandising, April, 1918
A disk fan that is constructed entirely of steel has been developed by the Bicalky Fan Company, Buffalo, N. Y. The hub is conical in shape, thereby offening the least resistance to the air, it is pointed out. This fan is equipped with ball bearings running in oil. The center shaft is stationary and the steel hub revolves in the shaft. The wheel shaft is hollow, thus providing a large oil chamber so that the fan requires oiling only occasionally. The fan is equipped with self-oiling babbitt bearings.

# **Ornamental Lighting Unit**

Ornamental Lighting Unit

From Electrical Merchandising, April, 1918

An ornamental lighting unit which diffuses the light with very little absorption and is of great value where low-candlepower lamps can be used, has been developed by the General Electric Company of Schenectady, N. Y. The stippled globe is in three sections, making renewal costs much lower than where a complete globe is used. This fixture can be furnished with or without dome refractor. In both cases there is enough light in an upward direction to illuminate the globe for its entire length. It is the only globe of a diffusing nature in which the refractor can be used to good advantage, especially with low-candle-power lamps, because it does not rob the light source of very much of its initial candlepower. When the refractor is used the lamps are of exceptionally high value for residential street lighting, because it collects all of the upward light and redirects it to the street surface away from the trees. The stippled glass g'obe is irregular on the inside, so as to split up the light rays and eliminate glare.



# Motor-Starting Switches

From Electrical Merchandising, April, 1918

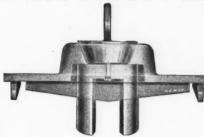
Motor-starting switches designed for low-voltage and overload protection are made by the Wells-Morris Manufacturing Company, 90 Second Street, San Francisco, Cal. These switches, equipped with protective plugs (inverse-time-limit design) of proper size, give both inverse-time-limit overhead protection and low-voltage protection. They also protect polyphase motors from operating single-phase. The switches are

furnished with left-hand threaded receptacles to receive the protective plugs.

These switches are quick-break, opening by gravity, spring-assisted. Each pole has two breaks in series and wiping contacts with a special member to take the arc. The contacts will not freeze closed, it is claimed. They open automatically when the power is interrupted or if a protective plug blows, giving absolute protection against overload and single phasing. The low-voltage release coil uses only a small amount of energy and is positive in its method of operation.

# Adapter for Snap Switches

From Electrical Merchandising, April, 1918 A container for snap switches, to make them water-tight, is being placed on the market by the Barlow Electrical Special-ties Company of Yonkers, N. Y. Into



cne of these switch boxes the wireman may insert any make of snap switch, either 5-amp. or 10-amp., single-pole or double-pole, three-way or electrolier type. When renewal of the switch becomes necessary the switch box is filled with a stock snap switch.

The switch box consists of a cast-iron hox drilled and tapped for the reception of conduits. Upon this is placed the cover, having the snap switch suspended on a yoke piece, the rubber handle of the snap switch being held by an insulated clutch on the under side of the cover. This in turn is operated by the knob outside the cover through a conical-valve ground piece seated on the cover. A round box is also made, 3½ in. in diameter, the cover of which threads on like the cap on a water pipe, no rubber gasket being required. Both the square and round boxes are made in a larger size, adapted to receive any standard 20, 30 or 50-amp. switch.

# Portable Electric Drill

From Electrical Merchandising, April, 1918



The Stow Manufacturing Company, Binghamton, N. Y., is manufacturing an electrically-driven, single-phase, portable drill for alternating or direct currents. The device is compact, powerful and light and the handles are removable. It is cooled by a fan, has ball-bearing spindle and armature, and the spindle is made from high-grade steel, heat treated, turned and ground. The gears are made from nickel steel and are also heat treated.

### Pull Chain Socket

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

The Benjamin Electric Manufacturing Company, 120 South Sangamon Street, Chicago, Ill., has announced a pull chain socket. The pull member differentiates from other types in that it is vertical and direct in action. The chain passes down inside the socket, insulated from live parts of the device which are molded in an insulating composition. This socket was subjected to the test by the Underwriters' Laboratories, and approved for use in damp places on account of the high insulation and the protection from moisture.

The shell in the weatherproof form of this socket is made in either aluminum or copper; the asbestos composition base of the molded parts is non-absorptive, so that there is no possibility of the molded portions becoming conductors from the live parts to the pull member.

These sockets are provided with a special lamp-grip feature which prevents lamps from failing. The device is approved for a rating of 660 watts, 250 volts, and the operating mechanism is of a quick-make-and-break type.

# Disk Stoves

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
The Thermax four-heat stove has recently been put on the market by Landers, Prary & Clark, New Britain, Conn. A disk 3 in. in diameter is surrounded by a ring 6 in. in diameter. Each has a heating unit which can be operated independently or in conjunction with the other. Two single stoves are thus combined into one and at a cost said to be less than that of the regular two-heat 6-in. disk stove.

The nichrome wire heating unit is incased in a polished and blued cast-iron top. The stand is nickel plated. Wattage of each unit is 300, the total wattage being 600. A convenient handle is provided.

provided.



Each item will fit a 3-in. x 5-in. standard filing card. Simply clip and paste on card (or loose-leaf sheet), filing under proper heading for ready reference when you want to buy. Continued on third and fourth pages following.

# New Publicity Director for Society of Electrical Development

Harry W. Alexander, for the last three years director of publicity for the Society for Electrical Development, New York, has resigned to become assistant to the president of the America Writing Paper Company, New York, and Holyoke, Mass., probably the largest manufacturer of high-grade paper in the world. Mr. Alexander organized and successfully directed, for the society, the publicity and sales work of both "Electrical Prosperity Week, 1915," and "America's Electrical Week, 1916," campaigns.

Prior to coming with the society in 1914, he was sales manager of the Federal Light & Traction Company, New York, and earlier was a financial and political writer on one of the leading Chicago newspapers.

Mr. Alexander is succeeded by Roy B. Woolley, now in the society's publicity and sales department, but late of the American Ambulance Field Service, Verdun sector, France. Mr. Woolley was formerly sales manager of the Standard Electric Stove Company, Toledo, and one time associated with the MacManus-Kelley Company, Toledo, and the F. Bissell Company, Toledo.



How can a man be "up in the air" and still keep his feet on terra firma? This paradox is demonstrated here by Harry W. Alexander, one-time director of publicity for the Society of Electrical Development and now assistant to the president of the American Writing Paper Company. We urge all good co-operators to stick by Harry in his new job, If every one of the million men in the electrical industry will write one letter each week on A. W. P. Co. writing piper, it will amount to 2.-166,6668 quires of paper annually—or just enough to keep Harry in beans and bonds.



Nobody loves an electrical inspector. But there is an exception to prove every rule. W. S. (Bill) Boyd, electrical inspector of the Committee on Fire Protection Engineering, Chicago, Ill., is well known as that exception. We believe that this is due to his apparent frankness for when his hat is removed nothing is concealed. F. O. Wallene, salesman of the Electrical Machinery Company, Minneapolis, Minn., has just performed the hat-removing operation for the benefit of our photographer.

# Associated Manufacturers of Electrical Supplies at New York, March 21

Trade acceptances and the tariff were the principal topics of discussion before the annual meeting of the Associated Manufacturers of Electrical Supplies at Delmonico's, New York City, on March 21. J. J. Gibson of the Westinghouse company reported on the work which the manufacturers' committee on tariff has undertaken, and Charles L. Eidlitz reported in favor of trade acceptances. Charles E. Dustin, general secretary, reviewed the work of the twenty-one sections of the association during the past year, and also told of the efforts being made at general standardization of products and devices.

Officers of the association were elected as follows: President, A. W. Berresford, Cutler-Hammer Manufacturing Company, Milwaukee, Wis.; vice-president, B. E. Salisbury, Pass & Seymour, Inc., Solvay, N. Y.; treasurer, J. W. Perry, H. W. Johns-Manville Company, New York; general secretary, Charles E. Dustin, New York; counsel, Judge Thomas M. Debevoise, New York.

New members of the board of governors were appointed as follows: Charles Blizard, Electric Storage

Battery Company, Philadelphia, Pa.; D. R. Bullen, General Electric Company, Schenectady, N. Y.; H. B. Crouse, Crouse-Hinds Company, Syracuse, N. Y.; H. R. Holmes, R. Thomas & Sons Company, East Liverpool, Ohio; J. F. Kerlin, National Carbon Company, Cleveland, Ohio.

ELECTRIC LIGHT OHIO NEW-BUSI-ASSOCIATION NESS MEN'S SECTION .-On March 20 the New-Business Men's Section of the O. E. L. A. held a lively meeting at Columbus, in which new-business getting and money raising for public utilities were discussed. In an address on "Contracts and Their Legality" L. E. Eastman said that the law under which the interstate commission acted and the Ohio law were practically the same in reference to contracts, and that all contracts must contain the published rate and be filed with the interstate commissions. A paper presented on "Domestic Refrigeration" brought out the fact that a special rate should be created on this kind of energy-consuming device, as the load obtained by it was very desirable. The next meeting of the New-Business Men's Section will be in Cleveland on May 6.



The secret is out! The industry has long wondered where all the good ideas come from which are published in The Hunchman—that snappy, helpful house organ of the Ivanhoe-Regent Works of Cleveland. Here is the answer: Whenever he needs ideas for a new issue, R. P. Askue, the Ivanhoe-Regent ad-man, starts out with his famous hunch-hound and tracks 'em down. If you don't believe it, look at the picture. The camera never lies.



Just as a breath of spring air flavored with burned gasoline was bringing on our annual attack of steering-wheel fever we discovered this picture of three lucky citizens living real life on the Apache Trail in Arizona. How Jacques Wolf on the left keeps his hair slicked down like that on a motor trip is beyond us. On the right the altitude is reminding President C. R. Newman of the N. J. Electrical Contractors' Association of the first time he stood up on a platform.

# Convention of Connecticut Contractor-Dealers

At a meeting of the Connecticut Association of Electrical Contractors and Dealers on March 27, James R. Strong, chairman of the advisory committee of the national association, read several letters from large manufacturing companies, pledging themselves to an established differential between industrial plants and the contractor and jobber. Isolated plants and industrial plants are to pay consumers' prices for electrical machinery and materials. At a dinner given by the association W. L. Goodwin gave a talk on the Goodwin plan and answered questions about it. The session was presided over by the State secretary, George M. Chapman, instead of E. A. Francis, who was unable to attend on account of illness. The meeting was attended by representatives of all branches of the electrical industry, including seventy-five contractors, twenty-seven jobbers, fifty-two manufacturer's representatives and nineteen central station men.

WISCONSIN ELECTRICAL ASSOCIATION.—The annual convention of the Wisconsin Electrical Association was held on March 27-28 at the Hotel Pfister, Milwaukee. Some of the important papers presented were "The Utilities and the War," by M. C. Ewing, secretary-treasurer of the Wisconsin Valley Electric Company, Wausau; "Metal

Electrode Welding," by Dean Treat, manager Wisconsin Railway, Light & Power Company, La Crosse. The feature of the meeting was an address by W. N. Fitzgerald, State Fuel Administrator for Wisconsin.

# Utah Society of Electrical Dealers

The spring convention of the Utah Society of Electrical Dealers was held at Salt Lake City on April 5 and 6. Among the papers presented were "The Aims of This Association," by E. H. Eardley of Eardley Brothers Company; "Shall We Have an Electrical Show in the Fall?" by R. S. Folland, Capital Electric Company; "The Goodwin Idea," by C. B. Hawley, Inter-Mountain Electric Company; "Merchandising of Lamps," by E. A. Evans, Lamp Company: Westinghouse "Trade Stimulation," by W. R. Putnam, Utah Power & Light Company; "Credit Conditions," by H. P. Stewart, Western Electric Company, and "The Trade Acceptance," by A. D. McMullen, Capital Electric Company.



It certainly seems like saddling a heap of responsibility on one little star on the service flag of Sessions & Gray at Salt Lake City to require it to represent all the thoughts of pride and loss and wishes for luck that were "thunk" when Al Sessions went to training camp. Al's friends are betting that the transfer of his energies from the electrical field, where he helped win a prize in the 1917 Western Electric Fan Merchandising contest, to the military line will result in the appearance of commission bars on his shoulder straps in record time.



Napoleon and the Old Guard at the battle of Association Island! And it is this same Napoleon A. Boynton—whose military figure is here shown astride a passing expressman's delivery nag—who has just resigned as director of publicity for the National Lamp Works, Nela Park, Cleveland, to become general manager of the Buckeye Electric Division of the National Lamp Works, succeeding L. P. Sawyer.

# Westinghouse Electric Products Company

The Westinghouse Electric & Manufacturing Company has announced that, as of April 1, 1918, the Copeman Electric Stove Company will be merged in a new company to be known as the Westinghouse Electric Products Company, with headquarters and factory at Mansfield, Ohio.

This factory will be devoted to the manufacture of heating appliances previously made at the Newark works of the Westinghouse Electric Company, and the Flint (Mich,) works of the Copeman Electric Stove Company.

The general operations of the new Westinghouse Electric Products Company will be directed by W. K. Dunlap, as general manager. Mr. Dunlay is also assistant to vice-president of the Westinghouse Electric & Manufacturing Company.

THE HOTPOINT DIVISION OF EDISON ELECTRIC APPLIANCE COMPANY, INC., on April 1 moved its contract department to the general offices of the company at 5660 West Taylor Street, Chicago, Ill. The Hotpoint Division's entire records have been trasferred to Chicago, and all information and contract records in the company's files will hereafter be available there.

# **Small Motor Switches**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

Here is shown an illustration of one of two switch condulets of the ZY series —the latest addition to the line of condult fittings manufactured by the Crouse Hinds Company of Syracuse, N. Y. It is claimed that these condulets protect the switch operator and the person renewing fuses from shock; they cannot be operated by accident; they withstand the roughest usage; water will not drain into them, and it is impossible for lint or other inflammable particles to lodge upon the current-carrying parts and thus create a fire hazard.

Both the body of the condulet and its cover are cast iron. Inside is a combined 20-amp. snap switch and fuse block. The switch is externally operated, and its handle interlocks with the latter cannot be opened when the switch is in the "on" position. As a result of this arrangement the circuit is dead when the door is open and fuses can be replaced without danger of shock or short-circuit. As the machine operator or any other person not skilled in electricity can change



fuses with perfect safety in ZY condulets, their use prevents all the loss in productive time which is unavoidable where an electrician must be sent for to replace fuses. This in the course of a year means a considerable saving in the operating time of the average mill.

The manufacturers list ZY condulets in one-gang and two-gang forms and in sizes and arrangements of threaded conduit hubs to meet various conduit wiring arrangements.

# **Heating Pad**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

A recently designed electric heating pad in which the heat-producing element is inclosed between two sheets of rubberized fabric, permanently vulcanized together, is being put on the market by the Wirt Company, Germantown, Philadelphia. The wire is laid in parallel strands 1/16 in. apart. A thermostat in this pad is unnecessary. Heat is generated by neans of resistance. It is claimed that as the heat increases the resistance increases, automatically reducing the watts consumed. The pad itself may be washed or sterilized as often as necessary. The full size of the pad is 10 in. x 14 in.

### Magnet Charger

From Electrical Merchandising, April, 1918

The Electric Equipment Company of Twelfth and Grand Streets, Los Angeles, Cal., is bringing out a magnet charger. It is designed to operate from an ordinary 6-volt storage battery or a group cf five or six dry cells. It is adjustable to any size magnet. The outfit consists of a charger and an instrument to measure the strength of the magnets to be charged.

# Carbon-Burning Spark Plug

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

The Flameless Combustion Spark Plug Company, of Illinois, 6316 Stony Island Building, Chicago, is marketing a spark lug that is claimed to keep the carbon Eurned off the spark plug insulators, even in smoky engines. This is done by what is known as catalytic combustion. It iteats the insulator on the compression stroke before the air is fouled by the spent gases from the explosion. The carbon and smoke are burned off the earthenware insulator, which is kept at a high temperature, by heat produced in burning a part of the gas-air mixture by flameless combustion the entire compression stroke of the engine.

In addition to the electrodes and insulator, this spark plug is provided with a catalytic structure which produces heat by oxidizing part of the gas-air mixture in contact therewith, by local catalytic contact flameless combustion. This is entirely different from ordinary flame composition, the kind that inflames or explodes the whole gas-air charge and produces power. This spark plug is the invention of C. K. Harding.

# **Loom Fasteners**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
The Snover Electric Company, 431 St. Clair Street, Toledo, Ohio, is manufacturing loom fasteners for flexible non-metallic conduit. These fasteners are said to grip firmly all sizes of flexible non-metallic conduit whose diameters do not exceed 4 in. It is also claimed that these fasteners will secure the tubing against withdrawal from place in knock-out boxes. Until the breaking point is reached the greater the pull on the tubing the ruore powerful is the grip exercised by the fastener.



From Electrical Merchandising, April, 1918

A refillable fuse plug now being manufactured by the Clemens Electrical Corporation of Buffalo, N. Y., consists of three parts and the fuse element. To renew the fuse, the two brass rings are unscrewed from the porcelain holder, the blown fuse element slipped out and a new one placed in position. By screwing the rings back the fuse element is held firmly in place in place

# **Battery Charging Outfit**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

For the garage man going into battery or service work Hobart Brothers Company of Troy, Ohio. have brought out a thirty-two-battery-capacity charging outfit.

With the HB outfit batteries can be handled by the four charging lines of this equipment, caring for eight batteries in each line. Batteries requiring different charging rates can be handled according to their individual needs, it is said, the total control of the machine. Lifferent voltage batteries can also be charged in the same line, due to the automatic voltage control of the generator. With this ample capacity outfit, battery charging work is claimed to be very profitable, and the makers state they have designed the outfit with the idea of bringing the garage the largest profits possible from battery-charging work.

# Waffle Iron

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
A device which is receiving attention is the waffle iron for lamp socket use, manufactured by Landers, Frary & Clark of New Britain, Conn. Highly-polished nickel finish gives it a pleasing appearance. This, combined with aluminum grids which require no grease and are smokeless, make it desirable for use at the dining table.

The waffles are 3½ in. x 3½ in. in size and two are prepared simultaneously, the cooking time required being only one and a half minutes. The iron is available in standard voltage ranges, the wattage being 600.



# Pipe Bender

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
A new type of pipe bender is being marketed by the Akron (Ohio) Electric Construction Company. The bender is light in weight and of strong construction. It has a small bending wheel with roller pin bearings and so requires a minimum of energy, and the manufacturers claim that it will make any degree of bend from 1 to 180 deg. Open construction allows the pipe to be inserted or removed with ease.



Clip These for Your Card or Loose-Leaf File of New Merchandise



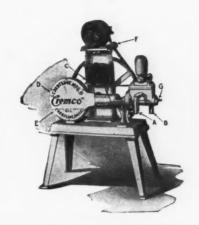
# Electric House Pump Automatically Controlled

cally Controlled

From Electrical Merchandising, April, 1918

A small electrically driven pump for supplying rain water to residences is shown in the accompanying illustration. It may also be used for a general water supply where city service is not available. The pump and motor are mounted on a cast-iron base and are connected by a belt. The pump is a low-speed type. An automatic controller switch is connected with the discharge pipe and is set to operate between pressures of 20 lb. and 40 lb. It can be adjusted, however, to operate between any pressures that may be pre-determined.

The pump is manufactured by the Crestline (Ohio) Manufacturing Company, and is equipped with a Robbins & Myers motor. The outfit is made in two capacities—125 gal. per hour and 250 gal. per hour, and in both sizes it will operate against a head of 50 lb. per square inch.



# **Projector**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
A projector equipped with an X-Ray reflector which is claimed to be unusually powerful, is being manufactured by the National X-Ray Reflector Company of Chicago. The projector uses the 400-watt Mazda C floodlighting lamp. The socket is adjustable and can be controlled from outside. This allows for a varying spread of light from 12 to 30 deg.

deg.

Another reflector which concentrates the beam is also available. This is used for searchlight work where the light must be thrown a long distance or must be concentrated on small area.

These projectors are very useful in ighting the outside of factories at night and thus depriving marauders of the protection afforded by darkness.

# Vacuum Cleaner

Vacuum Cleaner

From Electrical Merchandising, April, 1918

Next to effective removal of dirt from carpets, rugs, etc., the most important point about a vacuum cleaner is its durability. For this reason the turbine principle has been quite generally adopted by manufacturers, the typical machine having but one moving unit—an armature upon whose shaft extension is mounted the turbine rotor, the end of the shaft being housed in the bearing. Thus there are no gears, valves, bellows or diaphragms to require maintenance on the part of the user or the central station.

These principles are used in the "Vacuna" cleaner, manufactured by the Kent Vacuum Cleaner Company, Inc., of Rome, N. Y. The turbine used in sures a constant flow of air, thereby maintaining the suction pressure at practically the same value whether the opening of the cleaning tube is closed by contact with the surface to be cleaned or whether it is free. The turbine operates at very high speed, and is carefully balanced so as to run steadily without vibration. Westinghouse alternating-current universal motors are used.

# Anchor Bolts

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
"Ankyra Ankor" bolts, manufactured oy the Ankyra Manufacturing Company. 149 Berkley Street, Wayne Junction, Philadelphia, are now being offered to the trade. The advantages claimed for these bolts are that they can be applied quickly, are economical, that they are permanent in any wall—glazed or hollow tile, stucco, concrete lath-and-plaster, wall board, expanded or hollow sheet metal. They are permanent in the wall and are said not to loosen or fall out. The woodscrew used with them can be inserted or withdrawn repeatedly. Security with ability to remove a fixture without defacing the wall is an advantage.



# Electric Motor for Talking **Machines**

From Electrical Merchandising, April, 1918

An electrical Merchandising, April, 1918

An electric drive for talking machines has recently been put on the market by the Victor Electrical Equipment Company, 348 Boylston Street, Boston, Mass. The motor runs on either alternating or direct current from 100 to 125 volts without extra resistance or any adjustment and can be supplied for any voltage from 6 to 250. Fluctuations of current are said not to affect tempo or pitch. It is also claimed that the motor can be run continuously throughout the day without heating or giving trouble. It has a range of tempo from 20 to 120 r.p.m., and when the cover is closed it can be started and stopped at will by a switch in the cord. It does away with winding and is said to be much simpler than the old spring motor. Installation can be quickly made.

# Floor-Polishing Machine

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918
An electric floor-polishing machine is being manufactured by the Dale-Rey Corporation. 35 Church Street, New York City. The machine is easy to operate and it is said a boy or woman can handit it said a boy or woman can handit and quickly obtain a uniform result. The outfit weighs about 100 lb. and measures 9½ in. x 19 in. It is mounted on rollers and moves with little effort. The apparatus consists of a cylindrical brush propelled by a ½-hp. motor. The brush revolves at high speed and not in the same plane as the floor, but at right angles to it. This buffing action produces a hard surface. The brush consists of two semicircular aluminum cylinders mounted on an aluminum drum. It is claimed that with this machine one man can do more work than three men could by the old way.



# Medium-Base, Brass-Covered Receptacle

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

A medium-base, brass-covered receptacle is being offered to the trade by Pass & Seymour, Inc., of Solvay, N. Y. Its shell or cover is in one piece and is made rigid by an additional bead which is spun on the skirt of the cover.

The shell proper of this device is threaded to receive the standard types of the "Uno" shade holder. The brass shell or cover is anchored to the porcelain interior by means of twin screws. The porcelain foundation for the interior is cast in one piece, and on this the keyless interior is mounted.

The supporting screw holes for this device are spaced 1§ in, and 2 in, on cen-

ter. The holes for introducing the wires from the back of this receptacle are of ample size to accommodate heavy wires, and the terminal screws will be found of sufficient size and strength to grip and hold the wires.



# Motor-Operated Peanut Roasting and Corn-Popping **Machines**

From Electrical Merchandising, April, 1918

From Electrical Merchandising, April, 1918

A line of motor-operated peanut roasting and corn-popping machines of the type used in stores, amusement parks and at sidewalks stands has been developed by C. Cretors & Company of Chicago, Ill. The revolving parts of these machines are turned by a fractional-horsepower motor made by the General Electic Company.

By a slightly different arrangement of the heating apparatus either gas or gasoline may be used for the popping or roasting.

A motor suitable for the current supplied is furnished. It may be connected to the nearest lamp socket.

Each item will fit a 3-in. x 5-in. standard filing card. Simply clip and paste on card (or loose-leaf sheet), filing under proper heading for ready reference when you are in the market for electrical appliances or supplies.

# Signal Corps Has Openings for Many Electrical Men

The Signal Corps, United States Army, has announced that it can use the services of a large number of men having electrical training. They are needed especially in connection with the radio-communication systems in use in the military service. All classes of electrical men-wiremen, expert electricians, storage-battery men, telegraph and wireless operators, and men with electrical engineering training and experience are wanted. The scope of the work, in general, requires men who will fall into three classes, depending on the character and amount of experience had by the individual; namely, radio operators, radio mechanics and field radio experts.

Application blanks for service in the radio work of the Signal Corps may be secured by addressing the office of the Chief Signal Officer, Land Division, Training Section, Washington, D. C. Men of draft age may make application and if qualified will be inducted into the army, at their request, for service in this branch of the Signal Corps. After enlistment or induction, all men will be sent to one of several radio schools for six weeks to three months of intensive training in one of the three general branches of the radio work for which their previous experience qualifies them. Some of the men completing these courses will be commissioned, and the opportunity for advancement for all graduates will be dependent on individual ability.

H. W. STORTZ, for many years with the Edison Storage Battery Company, Orange, N. J., during which time he served efficiently as sales manager of the mine lamp, industrial truck and house-lighting vice-president and general sales manager of the Swartz Electric Company of Indianapolis, which manufacturers a very high grade of automatic lighting plants which use Edison storage batteries exclusively.

THE FRANK H. SEELY, JR., COMPANY is successor to the Pennsylvania Supply & Equipment Company of 421 Widener Building, Philadelphia, Pa.

CHARLES H. KEELING has joined the selling forces of the Square D Company, working the company's Canadian territory, with headquarters at Toronto. Mr. Keeling first went into business in Ottawa in 1907 and for six years he was in the contracting business, during this time completing some of the largest electrical installations in that city. Prior to coming to the Square D Company, Mr. Keeling was connected with the Renfrew Electric Manufacturing Company, Ltd., at Renfrew, Canada, as sales and advertising manager.



If ever a son was a "chip of the old block" it is young DeVeau, son of Al DeVeau of telephone fame. The picture shows Mr. DeVeau, Jr., who is a member of the 414th Batallion Signal Corps, Company D (U. S. A.) and is now "somewhere in France." Mr. DeVeau is married and before his enlistment lived in Flatbush, where he was for a number of years connected with his father in the firm of the DeVeau Telephone Manufacturing Company.

THE DODD-DUBOSQUE COM-PANY, INC., is the successor to J. D. Barnhill, Inc., 110 West Thirtyfourth Street, New York City, advertising and selling specialists. Philip S. Dodd is president, Clayton departments, has resigned to become Dubosque vice-president and treasurer, and William T. Andrews secretary of the new corporation.

> THEAJAX ELECTRIC COM-PANY of 56 Baldwin Avenue, Jersey City, N. J., has filed papers of incorporation in the County Clerk's office, Court House, Jersey City, with a capital stock of \$100,000. Adolph C. Corsten, 79 River Street, Hoboken, N. J., is the agent. The company will deal in, make and lease electrical machines and appliances.

S. M. MOORE, formerly with the General Electric Company, has been appointed service manager of the power equipment department of the New England Engineering Company, Waterbury, Conn.

THELINK-BELT COMPANY, CHICAGO, ILL., has issued publication No. 299 entitled "Link Belt Silent Chain for Rubber Mill Machinery."

FRED WILMARTH, who for years has been associated with E. F. Pendergast & Company, Rockford, Ill., will represent the Greusel-Quarfot Electric Company of Milwaukee at Rockford, as well as in northern Illinois, and southern Wisconsin. F. W. Greusel, who has been representing the company at Rockford, is forced to remain in the home office since duties inside require his time for the present.

THE OSTENRIEDER AD-VERTISING CORPORATION announces the removal of its offices to suite 1007-1011 Kimball Building. 25 East Jackson Boulevard, Chicago.

F. M. COCKRELL, formerly advertising salesman for ELECTRICAL MERCHANDISING and ElectricalWorld in Chicago, has been made manager of the Cleveland office for these two papers. Mr. Cockrell. before joining the McGraw-Hill Company forces, was employed in the publicity department of the Westinghouse Electric & Manufacturing Company at Chicago.

# Keeping Intact the Tie of Comradeship

The employees of the General Electric Company in the Chicago district have perfected an organization for the welfare of the men in this district who have gone into service. This work was started early last fall by the appointment of a committee consisting of a chairman, a secretary, a treasurer and members consisting of heads of departments.

A knitting unit was organized among the women employees to supply knitted articles. This unit, since September, has furnished more than 200 articles for the comfort of the soldiers.

A service news letter is being sent twice a month to all men in the service. This letter is brought out by an editor, two assistants and a reporter

